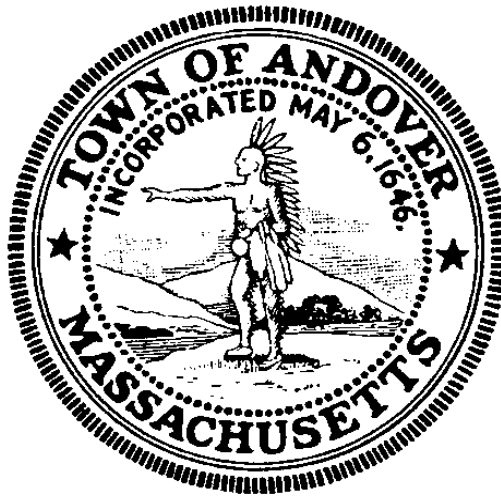


TOWN OF ANDOVER



TOWN MANAGER'S RECOMMENDED CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

TOWN OF ANDOVER
TOWN MANAGER'S RECOMMENDED
CAPITAL IMPROVEMENT PROGRAM
FY2019 – FY2023



Andrew P. Flanagan
Town Manager

November 3, 2017



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TOWN OF ANDOVER

MISSION & VALUES STATEMENT

*Developed by the
Board of Selectmen, Town Manager, and Town Department Heads
Adopted by the Board of Selectmen on October 6, 2003*

The mission of the Town of Andover is to ensure the safety, education, and well-being of the community; to be a leader in the delivery of efficient and effective quality services that respond to community needs; to promote the continuous improvement of staff skills and performance; to encourage an environment of trust; to respect cultural and economic diversity; and to preserve the historic character of the community.

The Board of Selectmen, as the chief policy makers for the Town of Andover, Massachusetts, will provide leadership in advancing the following primary and supporting values:

VALUE 1 – ENSURE THE SAFETY, EDUCATION, AND WELL-BEING OF THE COMMUNITY

- 1.1 Protect the safety of persons and property
- 1.2 Maintain the high quality of education for all
- 1.3 Maintain the Town's infrastructure
- 1.4 Promote public health programs and awareness
- 1.5 Manage the impact of non-municipal public utilities
- 1.6 Support human/community services
- 1.7 Ensure compliance with regulatory requirements
- 1.8 Identify and promote economic opportunities

VALUE 2 – BE A LEADER IN THE DELIVERY OF EFFICIENT AND EFFECTIVE QUALITY SERVICES THAT RESPOND TO COMMUNITY NEEDS

- 2.1 Deliver innovative municipal services
- 2.2 Encourage cost saving initiatives
- 2.3 Assess and prioritize community needs
- 2.4 Maintain the Town's "Aaa" bond rating

VALUE 3 – PROMOTE THE CONTINUOUS IMPROVEMENT OF STAFF SKILLS AND PERFORMANCE

- 3.1 Recruit, develop, and retain a highly skilled workforce

- 3.2 Promote and recognize municipal professionalism
- 3.3 Measure, evaluate, and improve performance

VALUE 4 – ENCOURAGE AN ENVIRONMENT OF TRUST AND HONESTY

- 4.1 Uphold high ethical standards
- 4.2 Value teamwork and cooperation
- 4.3 Promote open communication with the public
- 4.4 Solicit citizen participation
- 4.5 Recognize the outstanding contributions of citizens

VALUE 5 – RESPECT CULTURAL AND ECONOMIC DIVERSITY

- 5.1 Promote diversity in the workforce and community
- 5.2 Provide services that are accessible, fair, and equitable
- 5.3 Support housing alternatives

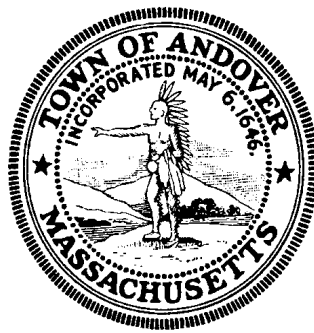
VALUE 6 – PRESERVE THE HISTORIC CHARACTER OF THE COMMUNITY

- 6.1 Celebrate Andover's unique heritage
- 6.2 Protect and acquire open space

Fiscal Year 2019 Budget and Town Meeting Planning Calendar

<i>July 26, 2017</i>	Issue FY2019-FY2023 Capital Improvement Plan request forms
<i>September 1, 2017</i>	Dept. CIP requests due to Budget & Finance
<i>September 20, 2017</i>	Staff review of Departmental CIP requests
<i>September 27, 2017</i>	Tri-Board Meeting - Financial Projections
<i>October 26, 2017</i>	Advertise Tax Classification Hearing and CIP Public Hearing
<i>October 30, 2017</i>	2018 Annual Town Meeting Warrant opens
<i>November 3, 2017</i>	Town Manager's Recommended FY19-FY23 CIP released
<i>November 7, 2017</i>	Issue FY2019 Operating Budget Request Forms & Instructions
<i>November 13, 2017</i>	Tax Classification Public Hearing / CIP Public Hearing
<i>November 27, 2017</i>	Board of Selectmen to discuss FY2019 Tax Levy
<i>November 27, 2017</i>	Tax Classification vote
<i>November 29, 2017</i>	Mid-Year Review
<i>December 6, 2017</i>	Tri-Board Meeting: CIP Review, FY19 Rev. & Exp. projections
<i>December 8, 2017</i>	Town sponsored warrant articles submitted to Town Manager
<i>December 18, 2017</i>	Selectmen vote to accept FY19 CIP
<i>December 29, 2017</i>	FY2019 Operating Budget Requests submitted to Town Manager
<i>January 26, 2018</i>	Town Meeting Warrant closes
<i>February 2, 2018</i>	Town Manager's FY19 Recommended Budget released
<i>February 12, 2018</i>	Warrant Article Review & Votes
<i>March 3, 2018</i>	Department Operating Budget presentations (joint mtg.)
<i>March 5, 2018</i>	Budget & Warrant Article Votes
<i>March 7, 2018</i>	School FY19 Operating Budget presentation (tri-board)
<i>March 12, 2018</i>	Budget & Warrant Article Votes
<i>March 19, 2018</i>	Budget & Warrant Article Votes
<i>March 21, 2018</i>	Final Budget votes due to Fin Com for Town Meeting Report
<i>March 21, 2018</i>	Final Votes on Water & Sewer Budgets & Rates
<i>March 27, 2018</i>	Annual Town Election
<i>March 28, 2018</i>	Chair Letters to the Finance Committee
<i>April 3, 2018</i>	Fin Com Report for Town Meeting sent to printer
<i>April 9, 2018</i>	Town Meeting Preparation (speaking assignments, coordination)
<i>April 11, 2018</i>	LWV Budget Forum
<i>April 20, 2018</i>	Fin Com Report mailed to residents
<i>April 23, 2018</i>	Town Meeting Preparation (speaking assignments, coordination)
<i>April 26, 2018</i>	Moderator's Preparation Meeting
<i>April 30, 2018</i>	First night of the 2018 Annual Town Meeting

SECTION 1



TOWN MANAGER'S CIP TRANSMITTAL LETTER



Andrew P. Flanagan
Town Manager

TOWN OF ANDOVER

TOWN MANAGER'S OFFICE

36 BARTLET STREET

ANDOVER, MA 01810

(978) 623-8200

WWW.ANDOVERMA.GOV

November 3, 2017

Paul J. Salafia, Chairman, and
Members of the Board of Selectmen
Town Offices
36 Bartlet Street
Andover, MA 01810

Dear Chairman Salafia and Members of the Board:

I am pleased to present the Town Manager's Recommended Capital Improvement Program (CIP) for FY 2019 – FY 2023. This is the twenty-seventh annual Capital Improvement Program. The CIP Bylaw requires that the Town Manager present the Board of Selectmen with the Town's capital needs for the next five years as the first step in the annual Budget development process.

Building Community

The Capital Improvement Program is a vital part of moving our Town forward. The theme of this year's program is building community. It is our goal to enhance the community through strategic investments in several functions of government. In the last two fiscal years, we have made historic investments in playgrounds. Earlier this year we celebrated the opening of the Andover Center Playground, an exciting project that relied on a strong community effort. We will continue to make investments in our downtown. Enhancing our public spaces and amenities will continue to support our efforts to maintain a vibrant downtown to create an experience for residents and visitors. Bringing people together has and will continue to be a cornerstone of Andover. The recommendations included in this year's CIP create new opportunities to bring people together.

With draft design guidelines being developed and the construction of a new Municipal Services Facility underway, the Historic Mill District will begin to take shape. A new vision for Andover's access to roads, the river, and the rail will lead to a transformative time in Andover's history.

The Ballardvale Fire Station is 127 years old and is long overdue to be rebuilt. With design plans that will integrate aesthetically with the Ballardvale Historic District, this project will ensure

the continued safety of not only our residents living in that area, but the men and women who serve Andover Fire Rescue. We look forward to this being a space the entire community can utilize.

When our residents enter Town Offices we want them to feel welcome. Whether attending a public meeting or paying a bill, the experience should be positive and engaging. Improving the function of our spaces within Town Offices will allow us to better serve the public. Building and space improvements will make for more efficient transactions and easier navigation of our high demand offices. We look forward to better serving Andover in a space that we can all be proud of and is consistent with the customer service program.

The Town Manager's Recommended Capital Improvement Program for FY 2019 totals \$27,836,806. The revenue sources shown to the right provide the funding for the projects.

The details of the recommended projects as well as the individual items in the Capital Projects Fund are shown on the following pages. As in every past CIP, the requests far exceeded the resources available to address them; however, through a collaborative process the CIP is within the established target and begins the budget process for FY 2019 and future years.

<i>FY 2019 Capital Improvement Program</i>	
General Fund Revenue	3,265,077
General Fund Borrowing	9,927,000
Use of Free Cash	4,200,000
General Fund Exempt Borrowing	0
Special Dedicated Funds	1,639,729
Water and Sewer Enterprise Funds	8,805,000
Total Recommendation	\$27,836,806

Establishing a "Target"

Standard and Poor's continues to affirm Andover's credit worthiness and the Town's "AAA" General Obligation bond rating. In fact, the most recent report gives Andover a "strong or very strong" rating on each of the seven assessment factors: economy, budget flexibility, budgetary performance, liquidity, management conditions, debt and contingent liability profile and institutional framework.

Notwithstanding the Town's legacy of prudent financial planning and commitment to fiscal stability, we have continued to make a major commitment in developing a Capital Improvement Program that establishes predictability and consistency in the capital planning process. Departments, Senior Management and Town staff have been challenged to carefully plan future year requests. The key to successful capital planning will require aligning projects with departmental priorities and scheduling major capital investments in a manner that responsibly integrates with the Town's debt schedule. Over the past year, I have presented a spending target that is both sustainable in the context of the limitations of Proposition 2 ½ and ensures that we are able to meet the long term needs of our community. The non-exempt target has been set at 5.72%. The FY 2019 recommended CIP is balanced and supports investments in all functions of Town government within the context of our target. The framework of the target is as follows:

<p>Prior Non-Exempt Debt Service</p> <p>+</p> <p>New Non-Exempt Debt Service</p> <p>+</p> <p>General Fund Revenue</p> <p>=</p> <p>Total Non-Exempt Plan</p>
--

The FY 2019 Recommended CIP is within the 5.72% target (5.3%) and the following four years of the CIP fluctuate for a five-year average of 5.62%. Consistent with every years' CIP, future years assume the use of free cash. While the plan will evolve as we move forward, below is a summary of anticipated expenditures and the financing plan for the next five years:

<i>General Fund</i>	<i>FY 2019</i>	<i>FY 2020</i>	<i>FY 2021</i>	<i>FY 2022</i>	<i>FY 2023</i>
<i>Prior Non-Exempt Debt</i>	4,765,320	4,313,680	4,022,844	3,881,714	3,416,345
<i>Capital Projects from Taxation</i>	3,265,077	4,120,109	3,934,316	3,669,433	3,455,598
<i>New Non-Exempt Debt Service</i>		1,168,792	2,614,114	2,154,351	2,627,101
<i>Non-Exempt Debt To Be Issued FY18/FY19</i>	1,253,176	1,669,395	1,951,860	2,199,433	2,169,841
<i>Total Non-Exempt Tax Burden</i>	9,283,573	11,271,976	12,523,134	11,904,931	11,668,885
<i>Pro Forma Adjusted Revenue Budget</i>	173,499,867	175,428,605	181,563,885	187,832,334	194,197,912
<i>Budget for Plan at 5.72%</i>	5.72%	5.72%	5.72%	5.72%	5.72%
<i>Plan as % of Adjusted Revenues</i>	9,924,192	10,034,516	10,385,454	10,744,010	11,108,121
<i>Potential Use of Free Cash</i>	(640,619)	1,237,460	2,137,680	1,160,921	560,764
<i>Variance from Budget</i>		1,237,460	2,137,680	1,160,921	560,764

Capital Project Fund (General Fund Revenue)

The recommendation for the Capital Project Fund is \$3,265,077 from General Fund Revenues. The recommendation for funding Town requests is \$2,225,077 and \$1,040,000 for School Department requests. The FY 2019 recommended CIP does not include funding for textbooks as this will be discussed during the development of the operating budget. This split is consistent with the distribution of resources from the Capital Project Fund over the past several years. Funding is being recommended specifically for Town and School facility repairs and improvements. Additionally, funds are being recommended for departmental projects that will improve the daily operations of our Town. This includes a record scanning project for Community Development and Planning, inspection software for the Health Division, and improvements of our Fire Rescue communication system. Additionally, we continue to make investments in playground replacements and accessibility to our conservation areas and public spaces.

Free Cash

Free Cash will provide significant opportunities in FY 2019 with \$4,200,000 available for capital projects. \$1,200,000 is being recommended for a feasibility study of West Elementary School. This feasibility study is part of our effort to be selected for partial funding by the Massachusetts School Building Authority (MSBA). The MSBA is expected to make a decision on whether or not to accept the project on December 13, 2017. Additionally, \$1,000,000 is recommended to be appropriated to subsidize the construction and land acquisition costs for the Ballardvale Fire Station. Investing in public spaces and amenities has been a hallmark of the administration and will continue to be in FY 2019. \$1,000,000 is being requested for Downtown Improvements focused on public amenities. Improving the experience of our customers will be a

major priority in the coming years. In the FY 2019 CIP, I am recommending \$1,000,000 for renovations to Town Offices to improve customer service. The last significant renovation to Town Offices was in 1983.

General Fund Borrowing

General Fund Borrowing includes several projects totaling \$9,927,000 for FY 2019. The sum of \$7,000,000 is recommended for the construction of the Ballardvale Fire Station. An authorization of \$555,000 is being requested to fund the replacement of large Municipal Services vehicles. Town and School major projects are recommended at \$775,000 and \$722,000 respectively. Additionally, \$565,000 is being recommended to continue the Town and School's energy initiatives and \$160,000 is requested for building and design services for the Center at Punchard.

General Fund Exempt Borrowing

There are no major capital projects being recommended this year that require General Fund Exempt Borrowing and therefore a Proposition 2½ debt exemption vote.

Special Dedicated Funds

There are three projects being recommended from Special Dedicated Funds. Chapter 90, Major Annual Road Maintenance, is recommended at \$1.36M. \$75,000 is being recommended from the parking fund to improve parking technology and \$200,000 is being recommended from cable funds for purchasing student devices.

Water and Sewer Enterprise Funds

The Water and Sewer Enterprise Fund has nine recommended projects for FY 2019 totaling \$8,805,000. This year it is recommended that \$3M be appropriated for the continuation of the major water main replacement program. The sum of \$5M is recommended for the replacement of the electrical substation at the water treatment plant. \$360,000 is being recommended for the replacement of the Dale Street Pumping Station. Additionally, \$195,000 is recommended for the replacement of Water & Sewer Division Vehicles and \$100,000 for the continuation of the hydrant replacement program.

The requests for FY 2019 are consistent with the 5 Year Water & Sewer Rate Structure adopted by the Board of Selectmen. The model assumes a 2.5% annual increase in both water and sewer rates. The model includes funding for extensive capital investments in both the water and sewer systems including upgrades at the water treatment plant and continuing the funding for major water main replacement by 100% to a total of \$3M.

Recommendations for the Water and Sewer Enterprise Funds are contingent on Special Town Meeting's approval of the inter-municipal agreement with North Reading. As our largest customer, North Reading contributes significantly to our capital improvements. Without this large customer, we will not be able to sustain such an aggressive capital improvement plan.

Conclusion

I will present the CIP to the Board of Selectmen at the Public Hearing on November 13,

2017. A Tri-Board meeting will be held on Wednesday, December 6, 2017 to discuss the CIP and the revenue and expenditure forecast and assumptions for FY 2019. The Board of Selectmen will discuss and formally adopt the CIP at their meeting on Monday, December 18, 2017. The CIP document is posted in its entirety on the Town's website at www.andoverma.gov.

I would like to take this opportunity to thank Patrick J. Lawlor, Management Analyst, Finance Director Donna M. Walsh and Deputy Town Manager John S. Mangiaratti for all of their contributions that have supported the production of this year's CIP. I would also like to thank the Department and Division Heads who have been thoughtful in the preparation of their requests and available to answer my questions, provide historical perspectives and contribute to the development of the program. I want to extend my appreciation to Superintendent Berman and his team for their participation in the capital budgeting process. The Superintendent has been a collaborative partner in the development of the plan and I look forward to working with him as we move it forward.

The recommendations presented in this CIP begin the public discussion about both fiscal and program priorities for FY 2019 and the subsequent four years. I look forward to reviewing these recommendations with the Board of Selectmen, School Committee, Finance Committee and our residents. My Administration will be committed to providing the information and resources necessary to fully inform the policy discussions that will take place in the coming months and will set forth recommendations that are reflective of those discussions and directed toward meeting the service expectations of Andover residents. The goal of our deliberations is to develop a Capital Improvement Plan and Operating Budget that is well-reasoned, balanced and justified within the Town's available revenues.

Respectfully Submitted,



Andrew P. Flanagan
Town Manager

SECTION 2



FY 2019 CIP RECOMMENDATIONS AND FUNDING SUMMARY

RECOMMENDATIONS AND FUNDING SUMMARY

FISCAL YEAR 2019 CAPITAL IMPROVEMENT PROGRAM (CIP) TOWN MANAGER'S RECOMMENDATIONS AND FUNDING SUMMARY

The Town's Department Heads submitted CIP requests totaling \$27.8 million for FY2019. Those requests were thoroughly discussed and considered during a series of internal group and individual review sessions. Based on the results of those sessions and the projected availability of funds as of this date, the Town Manager recommends a total FY19 CIP of \$27,836,806 from the following funding sources:

General Fund Revenue:	\$ 3,265,077
Free Cash:	\$ 4,200,000
General Fund Borrowing:	\$ 9,927,000
Special Dedicated Funds:	\$ 1,639,729
Water & Sewer Enterprise Funds:	<u>\$ 8,805,000</u>

Town Manager's Total CIP Recommendation for FY19: \$ 27,836,806

From General Fund Revenue:

It is recommended that the following capital projects be funded with General Fund Revenue. This is the annual "pay-as-you-go" funding from FY2019 tax dollars which will be presented as the Capital Projects Fund appropriation article at the Annual Town Meeting:

CS-2	Design Serv for Rec Park/Pomps Pond Master Plan	\$35,000
CDP-1	Record Scanning Project	\$30,000
CDP-2	HMD Feasibility Study/Support Mun Land Disp	\$50,000
CDP-4	Health Inspection Software	\$25,000
CDP-6	Merrimack River Access Feasibility & Design	\$25,000
CDP-7	Dale St Shawsheen River Access	\$15,000
CDP-8	Castle Heights ADA Project	\$15,000
CDP-11	Conservation Land Management	\$12,000
FIN-1	MUNIS Software	\$15,000
IT-1	Staff Device Refresh	\$300,000
POL-1	Police Vehicle Replacement	\$195,000
POL-2	Police Mobile Computer Software	\$55,077
FR-2	Communication Fire Alarm Receivers	\$84,000
FR-4	Fire Bi-Directional Amplifier System	\$130,000
DPW-2	Minor Sidewalk Repairs	\$200,000
DPW-7a	Public Works Vehicles - Small	\$128,000
DPW-28	Spring Grove Cemetery Improvements	\$20,000
P&F-1	Town Projects – Buildings	\$360,000
P&F-2	Town Projects – Mech. & Electrical	\$280,000
P&F-4	Town Vehicle Replacement	\$51,000
P&F-8	Town Playground Replacements	\$200,000
SCH	School Capital Projects (SCH-1, SCH-2)	<u>\$1,040,000</u>

Total from General Fund Revenue \$3,265,077

RECOMMENDATIONS AND FUNDING SUMMARY

From Free Cash:

It is recommended that the following projects, that would normally be funded by borrowing, be funded with Free Cash to save on long-term interest costs:

TM-1	Ballardvale Fire Land Acquisition & Construction	\$1,000,000
TM-2	Downtown Improvements – Public Amenities	\$1,000,000
TM-4	Town Offices Renovations	\$1,000,000
SCH-11	West Elementary Feasibility Study	<u>\$1,200,000</u>
Total from Free Cash		\$4,200,000

From General Fund Borrowing:

It is recommended that the following capital projects be funded through General Fund Borrowing:

CS-1	Center at Punchard-Design Services	\$160,000
TM-1	Ballardvale Fire Land Acquisition & Construction	\$6,500,000
IT-3	IT Platforms and Infrastructure	\$350,000
DPW-7b	Public Works Vehicles – Large	\$555,000
DPW-8	Minor Storm Drain Improvements	\$300,000
P&F-6	Major Town Projects	\$775,000
P&F-7	Town & School Energy Initiatives	\$565,000
SCH-5	Major School Projects	<u>\$722,000</u>
Total from General Fund Borrowing		\$9,927,000

From Special Dedicated Funds:

It is recommended that the following three recurring capital programs be funded through Special Dedicated Funds:

PRK-1	Parking Study Implement (Parking Fund)	\$75,000
IT-2	Student Device Refresh (Cable Funds)	\$200,000
DPW-1	Annual Road Maintenance (Ch 90)	<u>\$1,364,729</u>
Total from Special Dedicated Funds		\$1,639,729

From Water and Sewer Enterprise Funds:

It is recommended that the following capital projects be funded through Water and Sewer Enterprise Funds:

DPW-12	Water & Sewer Vehicles (WER)	\$195,000
DPW-14	Water Main Replacement Projects (WEB)	\$3,000,000
DPW-17	Hydrant Replacement Program (WER)	\$100,000
DPW-21	WTP Electrical Substation Replacement (WEB)	\$5,000,000
DPW-24	Minor Sanitary Sewer Collection Sys Imp (SER)	\$50,000
DPW-25	Dale St Pumping Station Replacement (SEB)	\$360,000
DPW-30	Inflow/Infiltration Removal Program	<u>\$100,000</u>
Total from Water & Sewer Enterprise Funds		\$8,805,000

CIP Total for Fiscal Year 2019

\$27,836,806

TOWN OF ANDOVER
TOWN MANAGER'S RECOMMENDED CAPITAL IMPROVEMENT PROGRAM
FY2019 - FY2023

Rqst. #	P.#	Request Title	Dept. Rqst. FY2019	TM's Rec. FY2019	TM's Plan FY2020	TM's Plan FY2021	TM's Plan FY2022	TM's Plan FY2023	Town Manager's Comments
General Fund Revenue (Capital Projects Fund)									
CS-2	67	Design Services for Rec Park/Pumps Pond Master Plan	\$35,000	\$35,000					Supports Department's Request for FY19
CS-3	68	Recreation - 15 Passenger Bus	\$76,000	\$0					Recommends deferral of this request
CS-4	69	Youth Services Storage Shed for Cormier Youth Center			\$60,000				Placeholder for Future Need
CDP-1	45	Record Scanning Project	\$60,000	\$30,000	\$50,000	\$50,000	\$50,000	\$50,000	Supports Department's Request for FY19
CDP-2	47	HMD Feasibility Study/Services Support Municipal Land Disposition	\$50,000	\$50,000					Supports Department's Request for FY19
CDP-3	49	Feasibility Study/Create Gathering Space/Enhance Parking	\$50,000	\$0					See TM-2
CDP-4	51	Health Inspection Software	\$25,000	\$25,000					Supports Department's Request for FY19
CDP-5	53	Bicycle & Pedestrian Master Plan			\$40,000				Placeholder for Future Need
CDP-6	55	Merrimack River Access Feasibility & Design Plan	\$25,000	\$25,000	\$60,000				Supports Department's Request for FY19
CDP-7	56	Dale Street Shawheen River Access	\$15,000	\$15,000	\$150,000				Supports Department's Request for FY19
CDP-8	58	Castle Heights ADA Accessible Area	\$15,000	\$15,000	\$25,000				Supports Department's Request for FY19
CDP-9	60	Bowling Green Feasibility Study			\$20,000	\$100,000			Placeholder for Future Need
CDP-10	62	Haggets Pond Accessible Rail Trail			\$15,000	\$150,000			Placeholder for Future Need
CDP-11	63	Conservation Land Management			\$12,000	\$12,000	\$12,000	\$12,000	Supports Department's Request for FY19
FIN-1	32	MUNIS Software	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	Supports Department's Request for FY19
IT-1	36	Annual Staff Device Refresh	\$492,787	\$300,000	\$509,509	\$553,116	\$573,633	\$577,498	Supports \$300,000 for FY19
IT-3	41	IT Platforms and Infrastructure			\$188,000	\$172,000	\$350,000	\$350,000	See IT-3 General Fund Borrowing
POL-1	71	Police Vehicle Replacement	\$215,000	\$195,000	\$215,000	\$225,000	\$225,000	\$235,000	Supports \$195,000 for FY19
POL-2	72	Police Mobile Computer Hardware	\$55,077	\$55,077					Supports Department's Request for FY19
FR-2	80	Communication Fire Alarm Receivers	\$84,000	\$84,000					Supports Department's Request for FY19
FR-3	81	Floor Covering Replacement	\$36,800	\$0					Does not Support this Request
FR-4	82	Bi-Directional Amplifier System	\$130,000	\$130,000					Supports Department's Request for FY19
DPW-2	86	Minor Sidewalk Repairs	\$200,000	\$200,000	\$250,000	\$250,000	\$250,000	\$250,000	Supports Department's Request for FY19
DPW-6	88	Storm Water Management			\$100,000	\$100,000	\$100,000	\$100,000	Placeholder for Future Need
DPW-7a	90	Public Works Vehicles - Small	\$128,000	\$128,000	\$200,000	\$255,000	\$120,000	\$140,000	Supports Department's Request for FY19
DPW-28	110	Spring Grove Cemetery Improvements	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	Supports Department's Request for FY19
P&F-1	113	Town Projects - Building Division	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	\$360,000	Supports Department's Request for FY19
P&F-2	115	Town Projects - Mechanical & Electrical Division	\$280,000	\$280,000	\$280,000	\$280,000	\$280,000	\$280,000	Supports Department's Request for FY19
P&F-4	117	Town Vehicle Replacement	\$51,000	\$51,000	\$139,000	\$93,000	\$121,000	\$78,000	Supports Department's Request for FY19
P&F-8	128	Town Playground Replacements	\$200,000	\$200,000	\$400,000	\$250,000	\$200,000		Supports Department's Request for FY19
SCH-1	131	School Projects - All Schools	\$585,000	\$585,000	\$585,000	\$585,000	\$585,000	\$585,000	Supports Department's Request for FY19
SCH-2	134	School Projects - By Building	\$455,000	\$455,000	\$426,600	\$464,200	\$407,800	\$403,100	Supports Department's Request for FY19
SCH-3	138	School Textbooks	\$626,000	\$0	\$0	\$0	\$0	\$0	Does Not Support this Request from General Fund Revenue
SCH-6	147	School Site Improvement Plan (FY21 and FY23 Borrow)			\$0	\$0	\$0	\$0	Does not Support this Request
SCH-9	149	Multi-School Sprinkler and Fire Alarm Study	\$80,000	\$0					Does not Support this Request
SCH-10	150	School Facilities Maintenance Trust Fund	TBD						
Total General Fund Revenue			\$4,376,664	\$3,265,077	\$4,120,109	\$3,934,316	\$3,669,433	\$3,455,598	

TOWN OF ANDOVER
TOWN MANAGER'S RECOMMENDED CAPITAL IMPROVEMENT PROGRAM
FY2019 - FY2023

Rqst. #	P#	Request Title	Dept. Rqst. FY2019	TM's Rec. FY2019	TM's Plan FY2020	TM's Plan FY2021	TM's Plan FY2022	TM's Plan FY2023	Town Manager's Comments
Free Cash									
SCH-11	151	West Elementary Feasibility Study							Supports the Use of \$1,200,000 of Free Cash for this FY19 Request
TM-1	24	Ballardvale Fire Land Acq & Construction	\$1,200,000	\$1,200,000					Supports the Use of \$1,000,000 of Free Cash for this FY19 Request
TM-2	25	Downtown Improvements - Public Amenities	\$1,000,000	\$1,000,000					Supports the Use of \$1,000,000 of Free Cash for this FY19 Request
TM-3	27	Town Offices Customer Service Building Improvements	\$1,000,000	\$1,000,000					Supports the Use of \$1,000,000 of Free Cash for this FY19 Request
		Total Free Cash	\$4,200,000		\$0	\$0	\$0	\$0	
Exempt Borrowing									
SCH-4	139	Andover High School Addition/Renovation Project		TBD					To be Determined Prior to 2018 ATM
		Total Exempt Borrowing		\$0					
General Fund Borrowing									
CS-1	66	Center at Punchard-Design Services/Bldg Construction	\$160,000	\$160,000	\$2,500,000				Supports Department's Request for FY19
TM-1	24	Ballardvale Fire Land Acquisition & Construction	\$7,000,000	\$7,000,000					Supports Department's Request for FY19 - See Also Free Cash
IT-3	41	IT Platforms and Infrastructure	\$608,000	\$350,000					Supports Department's Request for FY19
DPW-3	87	Road Maintenance	\$1,000,000	\$0	\$0	\$0	\$0	\$0	Town Manager does not Support Funding
DPW-7b	90	Public Works Vehicles - Large	\$555,000	\$555,000	\$380,000	\$485,000	\$570,000	\$600,000	Supports Department's Request for FY19
DPW-8	93	Minor Storm Drain Improvements	\$300,000	\$300,000		\$300,000			Supports Department's Request for FY19
DPW-9	94	Town Bridge Evaluation & Maintenance				\$500,000			Placeholder for Future Need
DPW-10	95	Reconstruction of Existing Sidewalks	\$1,156,000	\$0	\$0	\$0	\$0	\$0	Town Manager does not support funding
DPW-11	97	New Sidewalk Construction	\$1,073,000	\$0	\$0	\$0	\$0	\$0	Town Manager does not support funding
FR-1	77	Fire Apparatus Replacement	\$0	\$0	\$1,100,000	\$375,000	\$760,000	\$305,000	Recommends Deferral of this Request
P&F-6	119	Major Town Projects	\$775,000	\$775,000	\$430,000	\$555,000	\$630,000	\$1,300,000	Supports Department's Request for FY19
P&F-7	123	Town & School Energy Initiatives	\$565,000	\$565,000	\$800,000	\$800,000	\$650,000	\$755,000	Supports Department's Request for FY19
SCH-5	142	Major School Projects	\$722,000	\$722,000	\$2,385,000	\$1,615,000	\$1,880,000	\$1,100,000	Supports Department's Request for FY19
SCH-6	147	School Site Improvement Plan (FY20 and FY22 GF Revenue)				\$0		\$0	Town Manager Does Not Support Funding
SCH-12	152	Doherty Middle School Elevator	\$1,800,000	\$0					See SCH-5 for Doherty Feasibility Study
		Total General Fund Borrowing	\$15,714,000	\$10,427,000	\$7,595,000	\$4,630,000	\$4,490,000	\$4,060,000	
Special Dedicated Funds									
PRK-1	73	Parking Study Implementation (Parking Funds)	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000	Supports Department's Request for FY19
IT-2	94	Student Device Refresh	\$277,932	\$200,000	\$300,000	\$300,000	\$300,000	\$300,000	Supports Department's Request for FY19
DPW-1	95	Major Annual Road Maintenance (Ch 90)	\$1,364,729	\$1,364,729	\$1,364,729	\$1,364,729	\$1,364,729	\$1,364,729	Supports Department's Request for FY19
		Total Special Dedicated Funds	\$1,717,661	\$1,639,729	\$1,739,729	\$1,739,729	\$1,739,729	\$1,739,729	
Water & Sewer Enterprise Funds									
DPW-12	99	Water & Sewer Vehicles (WER)	\$195,000	\$195,000	\$243,000	\$245,000	\$80,000	\$250,000	Supports Department's Request for FY19
DPW-13	101	Filter Backwash Discharge Tank (WEB)				\$4,500,000			Placeholder for Future Need
DPW-14	102	Water Main Replacement Projects (WEB)	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	Supports Department's Request for FY19
DPW-16	104	WTP Parking Area Reconstruction (WER)	\$110,000	\$0					Town Manager Does Not Support Funding
DPW-17	105	Hydrant Replacement Program (WER)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	Supports Department's Request for FY19
DPW-18	105	Water Treatment GAC Replacement (WER)			\$400,000	\$400,000			Placeholder for Future Need
DPW-21	107	WTP Electrical Substation Replacement (WEB)	\$5,000,000	\$5,000,000					Supports Department's Request for FY19
DPW-24	108	Minor Sanitary Sewer Collections System Imp (SER)	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	Supports Department's Request for FY19
DPW-25	109	Dale Street Pumping Station Replacement (SEB)	\$360,000	\$360,000					Supports Department's Request for FY19
DPW-30	111	Inflow/Infiltration Removal Program (SER)	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	Supports Department's Request for FY19
		Total Water & Sewer Enterprise Funds	\$8,915,000	\$8,805,000	\$3,893,000	\$8,395,000	\$3,330,000	\$3,500,000	
		Total All Requests	\$34,923,325	\$28,336,806	\$17,347,838	\$18,699,045	\$13,229,162	\$12,755,327	

RECOMMENDATIONS AND FUNDING SUMMARY

Fiscal 2019 Recommendations – Funded by General Fund Revenue

	2019	2020	2021	2022	2023	Grand Total
CD&P	172,000	372,000	312,000	62,000	62,000	980,000
Conservation Land Management	12,000	12,000	12,000	12,000	12,000	60,000
Record Scanning Project	30,000	50,000	50,000	50,000	50,000	230,000
HMD Feasibility Study/Municipal Land Disposition	50,000					50,000
Feasibility Study/Gathering Space/Enhance Parking	0					0
Health Inspection Software	25,000					25,000
Bicycle & Pedestrian Master Plan		40,000				40,000
Merrimack River Access Feasibility Study & Design	25,000	60,000				85,000
Dale St Shawsheen River Access	15,000	150,000				165,000
Castle Heights ADA Project	15,000	25,000				40,000
Bowling Green Feasibility Study		20,000	100,000			120,000
Haggetts Pond Accessibility Rail Trail		15,000	150,000			165,000
Community Services	35,000	60,000				95,000
Design Services For Rec Park/Pomps Pond Master Plan	35,000					35,000
Recreation - 15 Passenger Bus	0					0
Youth Services Storage Shed for Cormier Youth Center		60,000				60,000
DPW	348,000	570,000	625,000	490,000	510,000	2,543,000
Storm Water Management		100,000	100,000	100,000	100,000	400,000
Public Works Vehicles - Small	128,000	200,000	255,000	120,000	140,000	843,000
Minor Sidewalk Repairs	200,000	250,000	250,000	250,000	250,000	1,200,000
Spring Grove Cemetery Improvements	20,000	20,000	20,000	20,000	20,000	100,000
Finance	15,000	15,000	15,000	15,000	15,000	75,000
Munis Software	15,000	15,000	15,000	15,000	15,000	75,000
Fire	214,000					214,000
Communication Fire Alarm Receivers	84,000					84,000
Fire Floor Covering Replacement	0					0
Bi-Directional Amplifier System	130,000					130,000
IT	300,000	697,509	725,116	923,633	927,498	3,573,757
Staff Device Refresh	300,000	509,509	553,116	573,633	577,498	2,513,756
Platforms and Infrastructure		188,000	172,000	350,000	350,000	1,060,000
P&F	891,000	1,179,000	983,000	961,000	718,000	4,732,000
Town Projects - Buildings	360,000	360,000	360,000	360,000	360,000	1,800,000
Town Projects - Mechanical & Electrical	280,000	280,000	280,000	280,000	280,000	1,400,000
Town Vehicle Replacement	51,000	139,000	93,000	121,000	78,000	482,000
Town Playground Replacements	200,000	400,000	250,000	200,000		1,050,000
Police	250,077	215,000	225,000	225,000	235,000	1,150,077
Police Vehicle Replacement	195,000	215,000	225,000	225,000	235,000	1,095,000
Police Mobile Computer Hardware	55,077					55,077
School	1,040,000	1,011,600	1,049,200	992,800	988,100	5,081,700
Multi-School Sprinkler and Fire Alarm Study						0
School Projects - All Schools	585,000	585,000	585,000	585,000	585,000	2,925,000
School Projects - By Building	455,000	426,600	464,200	407,800	403,100	2,156,700
School Textbooks	0	0	0	0	0	0
School Site Improvement Plan		0		0		0
School Facilities Maintenance Trust Fund	0	0	0	0	0	0
Grand Total	3,265,077	4,120,109	3,934,316	3,669,433	3,455,598	18,444,534

RECOMMENDATIONS AND FUNDING SUMMARY

Fiscal 2019 Recommendations – Funded by General Fund Borrowing

	2019	2020	2021	2022	2023	Grand Total
Community Services	160,000	2,500,000				2,660,000
Design Services For Rec Park/Pomps Pond Master Plan	160,000	2,500,000				2,660,000
DPW	6,715,000	5,880,000	6,285,000	6,070,000	3,600,000	28,550,000
Road Maintenance	0	0	0	0	0	0
Public Works Vehicles - Large	555,000	380,000	485,000	570,000	600,000	2,590,000
Minor Storm Drain Improvements	300,000		300,000			600,000
Town Bridge Evaluation & Maintenance			500,000			500,000
Reconstruction of Existing Sidewalks	0	0	0	0	0	0
New Sidewalk Construction	0					0
Filter Backwash Discharge Tank			2,000,000	2,500,000		4,500,000
WTP Electrical Substation Replacement	2,500,000	2,500,000				5,000,000
Water Main Replacement	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
Dale St Pumping Station Replacement	360,000					360,000
Fire		1,100,000	375,000	760,000	305,000	2,540,000
Fire Vehicle Replacement		1,100,000	375,000	760,000	305,000	2,540,000
IT	350,000					350,000
Platforms and Infrastructure	350,000					350,000
P&F	2,062,000	3,615,000	2,970,000	3,160,000	3,155,000	14,962,000
Major Town Projects	775,000	430,000	555,000	630,000	1,300,000	3,690,000
Town and School Energy Initiatives	565,000	800,000	800,000	650,000	755,000	3,570,000
Major School Projects	722,000	2,385,000	1,615,000	1,880,000	1,100,000	7,702,000
School		0	0		0	0
School Site Improvement Plan		0	0		0	0
TM	3,000,000	4,000,000				7,000,000
Ballardvale Fire Land Acq & Construction	3,000,000	4,000,000				7,000,000
Grand Total	12,287,000	17,095,000	9,630,000	9,990,000	7,060,000	56,062,000

Fiscal 2019 Recommendations – Debt Service

	Recommendation	FY 20	FY 21	FY 22	FY 23
Community Services	2,660,000	37,600	248,980	243,485	237,990
Design Services For Rec Park/Pomps Pond Master Plan	2,660,000	37,600	248,980	243,485	237,990
DPW	28,550,000	631,525	1,136,448	1,710,090	2,216,460
Road Maintenance	0	0	0	0	0
Public Works Vehicles - Large	2,590,000	74,925	124,283	186,485	258,465
Minor Storm Drain Improvements	600,000	40,500	39,450	78,900	76,800
Town Bridge Evaluation & Maintenance	500,000	0	0	67,500	65,750
Reconstruction of Existing Sidewalks	0	0	0	0	0
New Sidewalk Construction	0	0	0	0	0
Filter Backwash Discharge Tank	4,500,000	0	0	170,000	379,000
WTP Electrical Substation Replacement	5,000,000	212,500	420,625	411,875	403,125
Water Main Replacement	15,000,000	255,000	504,750	749,250	988,500
Dale St Pumping Station Replacement	360,000	48,600	47,340	46,080	44,820
Fire	2,540,000	0	111,833	159,892	233,279
Fire Vehicle Replacement	2,540,000	0	111,833	159,892	233,279
IT	350,000	82,250	79,800	77,350	74,900
Platforms and Infrastructure	350,000	82,250	79,800	77,350	74,900
P&F	14,962,000	254,303	656,454	987,326	1,326,504
Major Town Projects	3,690,000	104,625	159,963	230,670	309,560
Town and School Energy Initiatives	3,570,000	76,275	182,298	285,520	365,693
Major School Projects	7,702,000	73,403	314,194	471,136	651,251
School	0	0	0	0	0
School Site Improvement Plan	0	0	0	0	0
TM	7,000,000	163,114	380,599	380,599	380,599
Ballardvale Fire Land Acq & Construction	7,000,000	163,114	380,599	380,599	380,599
Grand Total	56,062,000	1,168,792	2,614,114	3,558,742	4,469,732

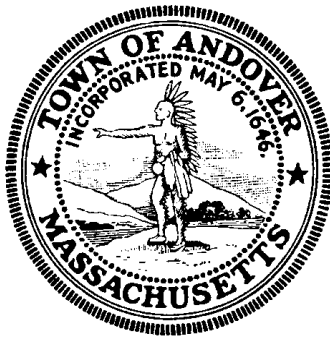
RECOMMENDATIONS AND FUNDING SUMMARY

SECTION 3



PROJECT REQUESTS BY DEPARTMENT

TOWN MANAGER



TOWN MANAGER

TOWN MANAGER

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Ballardvale Fire Land Acquisition & Construction*** **TM-1**

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$7,500,000
Original Dept. Request: \$7,500,000
Submitted by: Andrew P. Flanagan
Department: Town Manager
Funding Source: Free Cash-\$1,000,000
GF Borrow-\$7,000,000

Project Description:

Design and Reconstruction of the Ballardvale Fire Station and related costs including acquisition of property.

Project Justification and Purpose:

The Ballardvale Fire Station building is inadequately sized and is in poor condition. A new Ballardvale Station would provide an appropriate working environment for Fire and Rescue staff and adequate space for fire apparatus and equipment. The Town is embarking on an architectural feasibility study to determine the design options and compare the potential costs of constructing an addition versus reconstructing as a larger station.

Cost Estimate & Timing:

The funding request for FY19 would advance the project to final design and construction and land acquisition if necessary.

Estimated Annual Cost or Savings of Operation and Maintenance:

The annual operating costs will be determined as part of the final phase of design.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$8,000,000	\$8,000,000

TOWN MANAGER

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Downtown Improvements – Public Amenities*

TM-2

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$1,000,000
Original Dept. Request: \$1,000,000
Submitted by: Andrew P. Flanagan,
Department: Town Manager
Funding Source: Free Cash

Project Description:

This project would seek to establish a renewed sense of place and destination encompassing Old Town Hall, while providing for a rational solution for reconfiguring the municipal parking lot. With development of a centralized community gathering space it will afford residents, visitors, and business owners a dynamic public space for community engagement.

Project Justification and Purpose:

The project would seek to enhance pedestrian and vehicular safety along Barnard, Bartlet and Park Streets, reconfigure the existing Municipal Parking Lot and create a dynamic community space in downtown. This project has been further identified in the “Imagine Andover” Leadership ICMA



Consulting and Peer Assistance Project September 2016 and the Nelson Nygaard Parking Study 2016 as a Strategic Supply Optimization recommendation.

TOWN MANAGER

Cost Estimate & Timing:

Feasibility Study and conceptual designs estimate- \$50,000.

Engineering Costs estimate – \$100,000

Construction and related services estimate - \$850,000

Estimated Annual Cost or Savings of Operation and Maintenance:**Town Manager's Recommendation:**

The Town Manager supports this request.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,000,000	\$1,000,000

TOWN MANAGER

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Town Offices Customer Service Building Improvements* **TM-3**

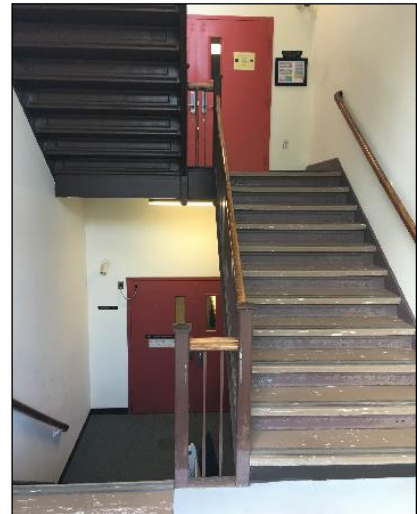
Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$1,000,000
Original Dept. Request: \$1,000,000
Submitted by: Andrew P. Flanagan
Department: Town Manager
Funding Source: Free Cash

Project Description:

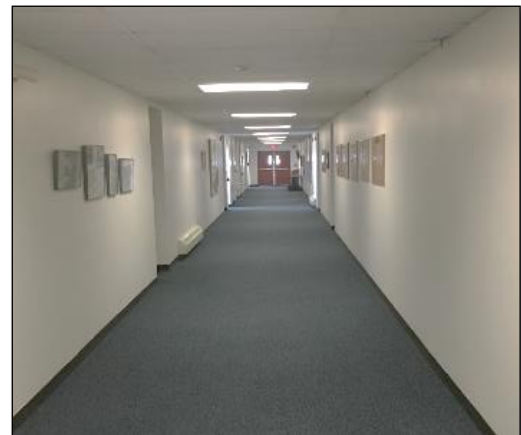
Using funding from an FY18 capital appropriation the Building Improvement Task Force is engaging a professional design firm to review existing conditions of Town Offices to identify short term and long term improvements that will improve the customer experience and make it easier for the public to conduct business. This FY19 request will provide funding to implement recommendations that will improve public access and enhance the overall employee/customer experience at the Andover Town Offices building. The evaluation should include, but not be limited to, the following issues identified by the Building Improvement Task Force:

1. Signage and wayfinding.
2. Building entrances and interior doorways.
3. Public meeting spaces and conference rooms.
4. Interior hallways and overall layout.
5. Restrooms.
6. Counter space and waiting and seating areas.
7. Optimal location of public facing office space.
8. Use of technology.
9. ADA Compliance*
10. Security of staff and the public



Project Justification and Purpose:

The Andover Town Offices are currently housed in what was originally the Punchard High School, renovated in 1986 to accommodate several departments, including, but not limited to, the Town Clerk, Town Treasurer, Town Manager, Community Development and Planning, etc.. As such, the configuration of the office and public spaces were developed over the years based on need, and not necessarily focused on the task of providing ideal customer service. The purpose of this project is to improve the customer service experience, and at the same time, improve the Town Office physical space to best serve all persons entering, using and working in the building that will reflect the Town of Andover's commitment to excellence in serving the public.



TOWN MANAGER

Cost Estimate & Timing:

The project will be completed in fiscal year 2019.

Estimated Annual Cost or Savings of Operation and Maintenance:

To be determined.

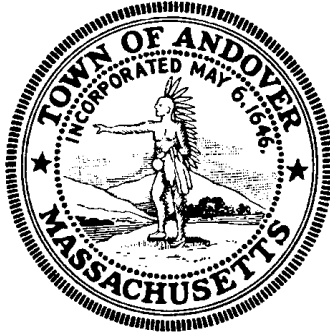
Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,000,000	\$1,000,000

TOWN MANAGER

FINANCE AND BUDGET



FINANCE AND BUDGET

FINANCE AND BUDGET

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***MUNIS Financial Software Improvements***

FIN-1

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$15,000
Original Dept. Request: \$15,000
Submitted by: Donna M. Walsh
Funding Source: General Fund Revenue

Project Description:

This request continues the implementation of additional MUNIS modules and allows more users to be trained on existing modules. Over the past five years many modules have been implemented and some are in progress. This request will help fund the purchase and implementation of MUNIS Employee Self Service and Tyler Content Manager as well as allow for on-going MUNIS consulting.

Project Justification and Purpose:

A fully integrated financial system should be a priority when feasible. This request will add to a previous request to fund the Employee Self Service (ESS) module. This software gives employees access to view sick and vacation history, allows employees to request time-off which the supervisory can approve electronically and allows employees to easily make changes to personal information. The module also stores information such as W-4 and historical W-2's. ESS also allows for a more seamless health insurance enrollment process. Funds are also requested to implement Tyler Content Manager. This software acts as an "electronic filing cabinet" allowing users to scan and attach financial documents in MUNIS.

Cost Estimate & Timing:

MUNIS Employee Self Service - \$32,000 License and Implementation
Tyler Content Manager - \$62,000 License and Implementation

Estimated Annual Cost or Savings of Operation and Maintenance:

Annual support for ESS is estimated at \$6,300. Annual support for TCM is estimated at \$8,500

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$15,000	\$15,000
2020	\$15,000	\$15,000
2021	\$15,000	\$15,000
2022	\$15,000	\$15,000
2023	\$15,000	\$15,000

FINANCE AND BUDGET

Information Technology



INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Annual Staff Device Refresh*

IT-1

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$300,000
Original Dept. Request: \$492,787
Submitted by: Paul J. Puzzanghera
Department: Information Technology
Funding Source: General Fund Revenue

Project Description:

This article provides personal computers (both desktop and laptop) to all Andover staff including Town knowledge workers, school knowledge workers and teachers. Devices are leased and are refreshed every four years.

Project Justification and Purpose:

This provides up to date computers for all Town and School staff.

Cost Estimate & Timing:

See chart below. In FY18 schools selected to refresh teacher devices with Windows based laptops rather than Apple Macintosh OS X type computers. This results in a significant net savings going forward. Also in FY18 IT elected to move away from purchasing vendor warranties and move to a self-repair model based on operating history. This has also yielded a significant savings.

In FY19 costs of certain management software are now shared with IT-2 as the number of student devices continues to expand.

Estimated Annual Cost or Savings of Operation and Maintenance:

All annual costs are included in this article.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$492,787	\$300,000
2020	\$509,509	\$509,509
2021	\$553,116	\$553,116
2022	\$573,633	\$573,633
2023	\$577,498	\$577,498

INFORMATION TECHNOLOGY

Device		Count	Unit Cost	FY19	FY20	FY21	FY22	FY23
Town and School Administrative Computers								
Existing Administrative Leases				61,661	21,397			
FY18 Town + School Admin Lease		100	210	21,018	21,018	21,018		
FY19 Town + School Admin Lease		105	210	22,069	22,069	22,069	22,069	
FY20 Town + School Admin Lease		110	210		23,120	23,120	23,120	23,120
FY21 Town + School Admin Lease		115	210			24,170	24,170	24,170
FY22 Town + School Admin Lease		120	210			25,221	25,221	25,221
FY23 Town + School Admin Lease		125	210					26,272
Monitor Purchase		75	200	15,000	15,000	15,000	15,000	15,000
Repair Allowance				23,949	20,521	21,075	21,916	22,757
Admin Machine Subtotal				143,697	123,123	126,452	131,496	136,540
Teacher/IA Computers								
Existing Teacher Leases				10,652				
FY18 Teacher Lease		675	296	187,441	187,441	187,441		
FY19 Teacher Lease		25	296	7,398	7,398	7,398	7,398	
FY20 Teacher Lease		25	296		7,398	7,398	7,398	7,398
FY20 IA Lease		200	124			24,750	24,750	24,750
FY21 Teacher Lease		25	296			7,398	7,398	7,398
FY22 Teacher Lease		675	296			199,753	199,753	199,753
FY23 Teacher Lease		25	296					7,398
Repair Allowance				41,098	40,448	46,877	49,340	47,860
Teacher Machine Subtotal				246,590	242,686	281,264	296,037	294,558
Software								
Microsoft Office + Cals Town Admin				45,500	14,700	15,400	16,100	15,400
Microsoft Office 365		300	240		72,000	72,000	72,000	72,000
Microsoft Office School Enterprise License				19,000	19,000	19,000	19,000	19,000
Management Software				26,000	26,000	26,000	26,000	26,000
Anti Virus Software				12,000	12,000	13,000	13,000	14,000
Software Subtotal				102,500	143,700	145,400	146,100	146,400
Total CIP Request				492,787	509,509	553,116	573,633	577,498

INFORMATION TECHNOLOGY

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Annual Student Device Refresh*

IT-2

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$200,000
Original Dept. Request: \$277,932
Submitted by: Paul J. Puzzanghera
Department: Information Technology
Funding Source: Cable Funds

Project Description:

Provide funding for iAndover 1:1 technology initiative. 100% of all Andover students now have full time, on-demand access to technology as needed. Devices are leased and replaced every four years.

Project Justification and Purpose:

This article provides funding to enable all Andover students to have access to a personal computing device during the school day to:

- Provide access to desktop and web based applications and learning platforms
- Provide a platform for moving fully to an eBooks digital format in lieu of expensive traditional paper versions
- Access new generation learning content (videos, audiobooks, rich multimedia content, etc.)
- Facilitate research and note-taking
- Provide assistive learning environments for special education students
- Encourage collaboration
- Create new opportunities for differentiated instruction and real time assessment

The Andover program utilizes a hybrid approach that provides in-school devices to elementary students but allows middle and high school students to “Bring Your Own Device” (BYOD) to permit 24x7 access to learning tools and environments. This model allows us to promote a full 1:1 program in a more cost efficient manner.

Specifically:

Grade K-1 students are provided with shared tablets by the district

Grade 2-5 students are provided an Internet capable laptop, currently a cost effective Chromebook device

Grades 6-12 May bring their own laptop. Students with demonstrated need are provided for by the district

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Cost Estimate & Timing:

See below.

In FY18 IT elected to move away from purchasing vendor warranties and move to a self-repair model based on operating history. Most of the repair costs from student machines are from “accidental damage” rather than device failure. Repair rates are higher than for staff devices. Nonetheless, this has yielded a significant savings.

Estimated costs include costs for configuring devices, providing protective cases as well as charging stations.

In FY19 costs of certain management software are now shared with IT-1 as the number of student devices continues to expand.

Estimated Annual Cost or Savings of Operation and Maintenance:

All annual costs are included in this article. Future costs increase as devices that were originally purchased using debt are refreshed using standard leasing terms.

Town Manager’s Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$277,932	\$200,000
2020	\$386,592	\$300,000
2021	\$563,989	\$300,000
2022	\$599,981	\$300,000
2023	\$610,984	\$300,000

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Use		Device Count	Unit Cost	FY19	FY20	FY21	FY22	FY23
Apple Leases		iPads for K-1 Students, SPED, Lab Devices						
	FY18 Apple Lease	150	110	16,505	16,505	16,505	44,013	44,013
	FY19 Apple Lease	400	110	44,013	44,013	44,013	44,013	44,013
	FY20 Apple Lease	600	110		66,019	66,019	66,019	66,019
	FY21 Apple Lease	100	110			11,003	11,003	11,003
	FY22 Apple Lease	100	110				11,003	11,003
	FY23 Apple Lease	100	110					11,003
	Repair Cost			16,000	16,000	16,000	16,000	16,000
Apple Subtotal				76,518	142,537	153,540	148,038	159,042
Chromebook Leases		Chromebooks for Grade 2-5 Students						
	FY18 Chromebook Lease	750	124	87,774	87,774	87,774	12,375	12,375
	FY19 Chromebook Lease	100	124	12,375	12,375	12,375	12,375	12,375
	FY20 Chromebook Lease	100	124		12,375	12,375	12,375	12,375
	FY21 Chromebook Lease	1,100	124			136,128	136,128	136,128
	FY22 Chromebook Lease	800	124				99,002	99,002
	FY23 Chromebook Lease	100	124					12,375
	Repair Cost			32,000	32,000	32,000	32,000	32,000
Chromebook Subtotal				132,149	144,524	280,652	291,880	291,880
Windows Leases		Loaners for MS/HS Students, Lab Devices						
	FY19 Windows Lease	150	202	30,266	30,266	30,266	30,266	30,266
	FY20 Windows Lease	150	202		30,266	30,266	30,266	30,266
	FY21 Windows Lease	150	202			30,266	30,266	30,266
	FY22 Windows Lease	150	202				30,266	30,266
	FY23 Windows Lease	150	202					30,266
	Repair Cost			8,000	8,000	8,000	8,000	8,000
Windows Subtotal				38,266	68,531	98,797	129,062	129,062
Software								
	Microsoft Office School Enterprise License			19,000	19,000	19,000	19,000	19,000
	Management Software			8,000	8,000	8,000	8,000	8,000
	Antivirus Software			4,000	4,000	4,000	4,000	4,000
Software Subtotal				31,000	31,000	31,000	31,000	31,000
Total CIP Request				277,932	386,592	563,989	599,981	610,984

INFORMATION TECHNOLOGY

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *IT Platforms and Infrastructure*

IT-3

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$350,000
Original Dept. Request: \$608,000
Submitted by: Paul J. Puzzanghera
Department: Information Technology
Funding Source: GF Borrow/GF Revenue

Project Description:

This project contains funding for all IT infrastructure including both hardware and software platforms that are shared by all Town and School departments.

Project Justification and Purpose:

In FY19 for the first time we are combining all IT infrastructure requests into a single article. The two largest spending components of this article are:

Update of High School Projectors – In FY14 the Town provide funds to upgrade all of the Middle School classroom projection technology to state of the art, low cost interactive projectors. Older “smartboard” technology was repurposed to the elementary level. In FY17 and FY18 the Town provided funds to replace all aging elementary school “smartboards” with new cost effective projectors. This article provides the funding to complete the upgrade of all high school classroom display technology to match existing elementary and middle school technology. This article includes funding for projectors, white boards, cabling and installation.

Media Management and Delivery Platform – Increasingly larger amounts of our information is rich media rather than simple spreadsheets and databases. Examples of this include: recorded video of board meetings, recordings of athletic events and dramatic productions, student based multimedia projects, “flipped classroom” lessons, 3rd party interactive learning tools, podcasts, internal training, digital signage and much more. This article provides funding for a universal system to store, manage and distribute large volumes of rich content. This content can be organized into “channels” and distributed both internally and to citizens and parents via existing town and school web sites. It also provides funding to expand the digital signage initiatives currently piloted by many departments to create an improved interactive experience for citizens and parents within our buildings.

Cost Estimate & Timing:

Installation would occur in the summer of 2018.

INFORMATION TECHNOLOGY

Estimated Annual Cost or Savings of Operation and Maintenance:

New style projectors are much more efficient than older style Smartboards. Acquisition costs are roughly 50%. IT has experienced a repair rate of less than 1% during the first four years of projector operation. Projector bulbs and related consumables are roughly \$75 compared to more than \$400 for older proprietary technology.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$608,000	\$350,000
2020	\$188,000	\$188,000
2021	\$172,000	\$172,000
2022	\$742,000	\$350,000
2023	\$690,000	\$350,000

INFORMATION TECHNOLOGY

Platform	Project	FY19	FY20	FY21	FY22	FY23
Hardware Platforms	Fiber	Maintenance/Expansion				
	Multimedia	Digital Signage				
	Multimedia	Elementary Projector Refresh	60,000	10,000	10,000	10,000
	Multimedia	High School Projector Refresh				
	Multimedia	Media Management and Delivery Platform	300,000			
	Multimedia	Middle School Projector Refresh	125,000			
	Multimedia	Printer Consolidation			300,000	
	Multimedia	Town Refresh				
	Network	Access Point Refresh		10,000	10,000	10,000
	Network	Archiver Refresh	10,000			15,000
	Network	Firewall Refresh				75,000
	Network	Load Balancer Refresh				15,000
	Network	Mobile Device Management				
	Network	SPAM Firewall Refresh				20,000
	Power	Batteries		28,000		
Software Platforms	Power	UPS Refresh				80,000
	Servers	Refresh				
	Servers	Virtualization Support	28,000		42,000	42,000
	Storage	Annual Growth	20,000	20,000		
	Storage	Backup Expansion				
	Storage	Refresh			60,000	60,000
	Switches	Core Refresh				60,000
	Switches	Edge Refresh				
	Unified Comm.	Handset Replacement/Expansion		25,000	25,000	200,000
	Unified Comm.	Intercoms		5,000	5,000	5,000
	Unified Comm.	Server/Handset Refresh		10,000	10,000	10,000
	Wiring	Maintenance/Expansion		10,000	10,000	275,000
				10,000	10,000	10,000
Services	Document Management	Document Management Software	25,000			
	GIS	GIS		25,000		
	Network	Network - Monitoring Platform	15,000			
	Server	Database Server Software Licenses and CALS	7,500			
	Server	VEEAM Backup Expansion		10,000		
	Web	Intranet	7,500			
	Web	Web Site Enhancements	10,000			
Content	Security	Security Audit		35,000		
Total CIP Request			608,000	188,000	172,000	742,000
						690,000

COMMUNITY DEVELOPMENT & PLANNING



COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *CD&P Record Scanning Project*

CDP-1

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$30,000
Original Dept. Request: \$60,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

The Department currently has 291 boxes of files in storage that need to be scanned. We propose to coordinate with the IT Department to utilize a records management software to scan and index all of the records to allow them to be retrievable online. This process



will increase transparency as volumes of public records will become available to the public and it will increase efficiency as our office staff will spend less time retrieving, searching, collating, and refiling records. Since the enactment of the new public records law CD&P has seen a substantial increase in public records requests in the months of July and August of 2017 CD&P has had over 30 public records requests. Indexing all the records will reduce the time spent retrieving records and will increase the efficiency of the office staff, enabling us to provide the information to the public in a quick and timely manner.

Project Justification and Purpose:

The IT Department is taking the lead on identifying the technology solution that we will use for the records management. The purpose of this CIP request is to request the necessary funding to hire a company to scan the multiple boxes of records. We intend to use competitive bidding to select a scanning vendor to do a pilot project, which we will then use to implement a comprehensive multi-year scanning project. The Year one amount requested is for the pilot project and the first batch of scanning records. The subsequent years are for additional batches of records. As part of the pilot project, the selected consultant will provide recommendations for changes to the permitting process to support the scanning of new records as new plans and projects are submitted.

Cost Estimate & Timing:

The cost estimate is \$60,000 for a pilot project and study with implementation recommendations and an initial batch of scanning. A placeholder amount of \$50,000 has been included for each subsequent year to continue the process of scanning all of the records. The requested amount for subsequent years will be adjusted after the completion of the pilot project.

Estimated Annual Cost or Savings of Operation and Maintenance:

It is expected that this project will create operational efficiencies and reduce staff time needed to retrieve records from the archives.

COMMUNITY DEVELOPMENT & PLANNING

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
FY19	\$60,000	\$30,000
FY20	\$50,000	\$50,000
FY21	\$50,000	\$50,000
FY22	\$50,000	\$50,000
FY23	\$50,000	\$50,000



COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Historic Mill District – Feasibility Study/Services to Support Municipal Land Disposition*

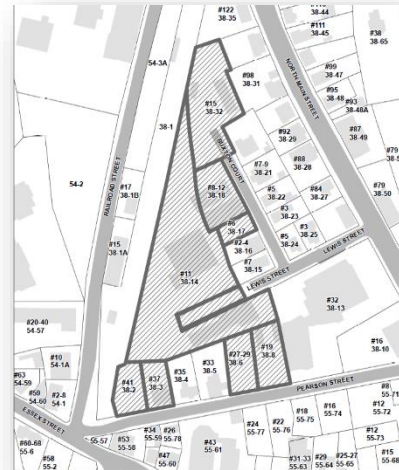
CDP-2

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$50,000
Original Dept. Request: \$50,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

With the goal of helping set the table for targeted economic development in the Historic Mill District, the Town seeks to obtain the services of a land use consultant to assist with the development of an RFP for disposition of Municipal Land off Lewis Street. Additional services may include performing a traffic feasibility study to examine existing & future traffic conditions, market analysis and/or any other services needed in order to prepare the municipal land for disposition.



Project Justification and Purpose:

The project would seek to: Obtain the services of various consultants with expertise in land disposition, traffic engineering, market analysis and/or any other services which are deemed necessary in order to prepare the Municipal Land off Lewis Street for disposition and redevelopment.

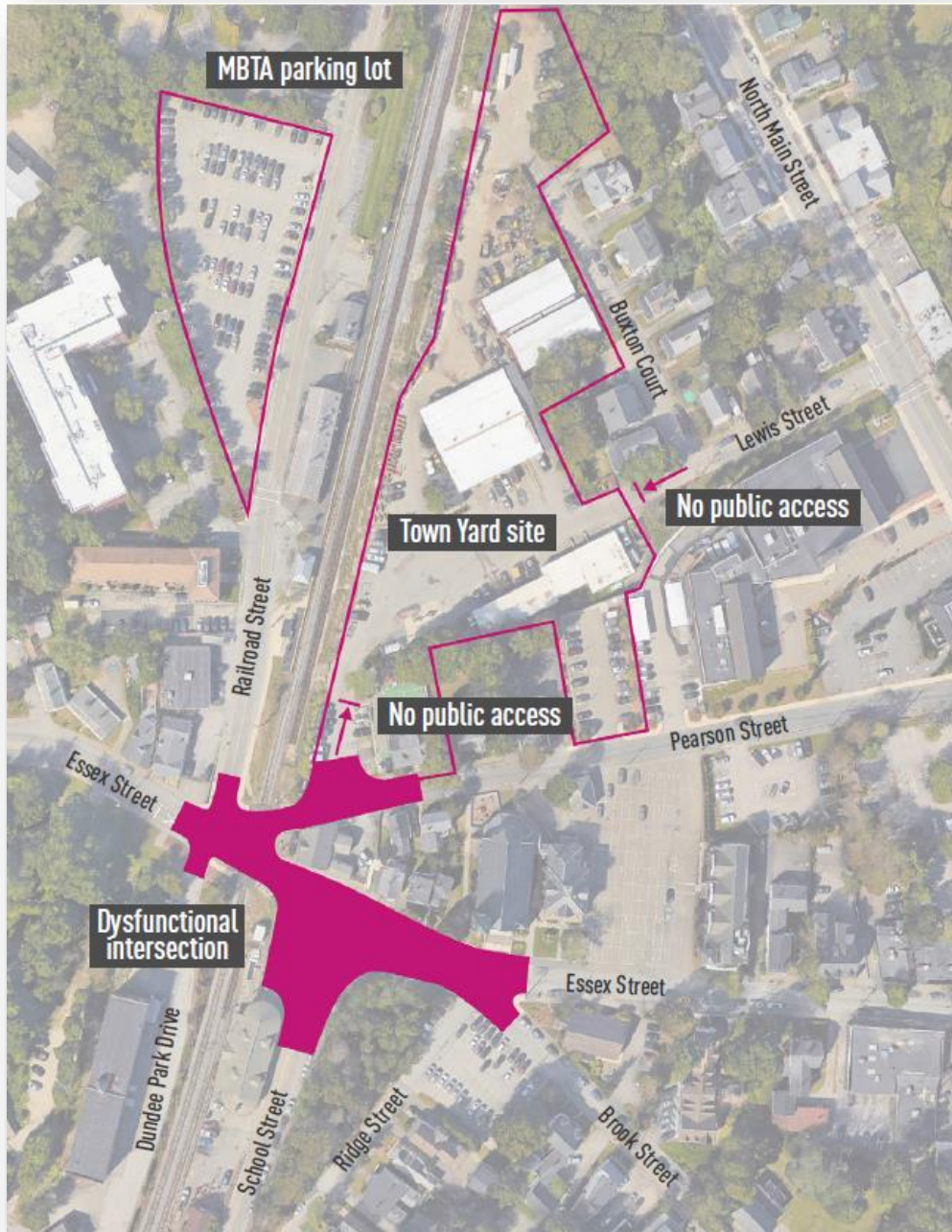
Cost Estimate & Timing:

Total Cost Feasibility Study \$50,000

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$50,000	\$50,000



COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Feasibility Study to Create a Community Gathering Space (while enhancing downtown parking options)* **CDP-3**

Department Priority Ranking: 3
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: \$50,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

The purpose of this feasibility study, will allow for the Town of Andover to deliver a strategic place making opportunity in downtown. This project would seek to establish a renewed sense of place and destination encompassing Old Town Hall, while providing for a rational solution for reconfiguring the municipal parking lot. With development of a centralized community gathering space it will afford residents, visitors, and business owners a dynamic public space for community engagement.



Project Justification and Purpose:

The project would seek to: Perform a feasibility study that will seek to enhance pedestrian and vehicular safety along Barnard, Bartlet and Park Streets, reconfigure the existing Municipal

COMMUNITY DEVELOPMENT & PLANNING

Parking Lot and create a dynamic community space in downtown.

This project has been further identified in the “Imagine Andover” Leadership ICMA Consulting and Peer Assistance Project September 2016 and the Nelson Nygaard Parking Study 2016 as a Strategic Supply Optimization recommendation.

Cost Estimate & Timing:

Total Cost Feasibility Study Request - \$50,000.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager’s Recommendation:

The Town Manager does not support this request. See TM-2 Downtown Improvements – Public Amenities

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$50,000	\$0

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Health Inspection Software*

CDP-4

Department Priority Ranking: 4
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$25,000
Original Dept. Request: \$25,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

Purchase of health inspection software to conduct routine health inspections using a tablet. There is software used by multiple local health departments in MA and the MDPH. The purchase would allow for 11 devices to operate the software (6 field devices, 5 office stations).

Project Justification and Purpose:

This project is consistent with the goal of streamlining the permitting process and it will help achieve the strategic priorities outlined in the Town's customer service program. View permit is a good platform for permitting of projects and licenses, but their inspection software for health departments is not robust or user friendly. We have been unable to launch an on-line inspection program for food inspections. This software provides proper inspection reports for food service, swimming pools, recreation camps for children, and housing, and is used by several Massachusetts communities as well as the MA Department of Public Health.

By utilizing this software, the following benefits are expected to be realized:

- Hand written reports will be eliminated, replaced with legible reports.
- Electronic reports allow the elimination of paper inspection reports as well as the need for the storage of those reports.
- Hand written reports are currently scanned to digital storage in batches, by hand; digital inspection reports will eliminate this step.
- Should the Board of Health choose to move inspection reports on-line for public access, they will not need to be scanned by hand.
- There are some audit companies that request recent inspections reports for their clients, which require us to hand scan those reports.
- The software will provide better citation of regulations violated, saving time in the inspection report preparation as well as the issuance of any written orders.
- The software will allow us to better analyze inspection reports to identify common code violations cited during inspections. This allows us to better concentrate our compliance attention and training on those items.
- The Health Division is currently enrolled in the FDA Voluntary Retail Food Standards Program, and electronic inspections are identified as a best practice in those standards.
- By meeting these standards, we better serve our residents and consumers, as well as the regulated businesses.

Deferring this project means status quo inspectional services, continuing inefficiencies that are currently in place. We have tested the View Permit Food Inspection product and find it difficult to use. More importantly, the View Permit Software is not robust enough to allow us to perform the needed data analysis.

COMMUNITY DEVELOPMENT & PLANNING

Cost Estimate & Timing:

\$25,000

The purchase allows for 11 licenses for use of the product, including 6 field tablets and 5 office stations. The PC stations to use this software includes the Director, Deputy Director, Health Agent, Health Inspector, and Administrative Secretary. Tablet licenses would benefit the Director, Deputy Director, Health Agent, Health Inspector, and two contract inspectors who would be expected to conduct their inspections using the software.

The request is made based on a particular product price quotation dated August 10, 2017 and valid for 60 days. The actual quote is \$21,175. Before a purchase is made a thorough evaluation of software options will be conducted.

Implementation will be performed in one fiscal year.

It should be noted that grant opportunities are being sought to offset this purchase cost.

Estimated Annual Cost or Savings of Operation and Maintenance:

The provided quotation for Annual Software Maintenance for 5 years ranges from \$4,675 to \$4,815, which would then be addressed within the CD&P annual operating budget.

Town Manager's Recommendation:

The Town Manager supports funding this request in FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$25,000	\$25,000

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Bicycle & Pedestrian Master Plan***

CDP-5

Department Priority Ranking: 5
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY20 Request
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

Purpose of the Bicycle & Pedestrian Master Plan has five major goals:

1. Update existing sidewalk master plan and produce necessary technical information to support the potential pursuit MassDot's Complete Streets funding.
2. To provide policies and guidelines for public infrastructure and facilities that will make walking/biking safer, easier, and more attractive.
3. To provide design standards for physical improvements related to the pedestrian realm.
4. To outline steps to encourage walking/biking as an alternative to automobile travel, as beneficial exercise, and as a benefit to the community.
5. To provide an action plan to create an economical and efficient non-automobile transportation network within Andover, identifying short term recommendations for low cost, low impact pedestrian improvements, as well as long term recommendations and including establishing connections to other communities and destinations.

Project Justification and Purpose:

The project would seek to: Develop a bicycle and pedestrian master plan that will assist the Town with targeted infrastructure investment, with the goal of enhancing pedestrian mobility and safety throughout community.

This project is supported by Town's 2012 Master Plan (excerpts below), which encourages:

- LU.1.4. Encourage pedestrian access in downtown.
- LU.1.7. Help downtown Andover to become 100% accessible to persons with disabilities.
- LU.5.2. Promote a pedestrian-oriented downtown that respects Andover's small-town character and heritage.
- OS.8.6. Support on-road and off-road biking for recreation and for commuting to work and school.
- TC.2.1. Promote local transportation improvements such as bridge repairs, congestion elimination, and new sidewalks.
- TC.3.1. Provide for safe and comfortable bicycle and pedestrian circulation throughout Andover.
- TC.4.1. Promote environmentally friendly road construction techniques.
- MF.1.6. Implement new technologies and "Green initiatives"⁴ to conserve power and reduce Andover's carbon footprint.

This request follows initial conversations with Municipal Services Department regarding collaboration on this effort and if this request is approved the project will be implemented in coordination and collaboration with Municipal Services.

COMMUNITY DEVELOPMENT & PLANNING

Cost Estimate & Timing:

Total Cost Feasibility Study \$40,000, Design Services \$TBA, Construction \$TBA – Total Request - \$

Estimated Annual Cost or Savings of Operation and Maintenance:**Town Manager's Recommendation & Priority Ranking:**

The Town Manager supports funding this request in FY20.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2020	\$40,000	\$40,000

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Merrimack River Access Feasibility & Design Plan*

CDP-6

Department Priority Ranking: 6
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$25,000
Original Dept. Request: \$25,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

Design access to the Merrimack River and Andover Conservation land via the Heffron Right of Way and Greater Lawrence Technical School property, and roadway extension through the Reservation. Design of the access road to the site must incorporate safe access and egress onto River Road and public access to the parcel owned by the Town of Andover.

Project Justification and Purpose:

A large public scenic Riverfront reservation has been inaccessible to access by Andover's citizens. This project will provide the design phase of that access. The site is suitable for fishing, sailing, canoeing, kayaking, birdwatching, high school crew programs, and many other uses.

Cost Estimate & Timing:

Estimated Annual Cost or Savings of Operation and Maintenance:

1. Start up, Design Development and Permitting \$25,000
2. Site work Construction Documents and Bidding Plans \$60,000

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 and FY20.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$25,000	\$25,000
2020	\$60,000	\$60,000

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Dale Street Shawsheen River Access***

CDP-7

Department Priority Ranking: 7
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$15,000
Original Dept. Request: \$15,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

The objective of this project is to formalize public access to a beautiful stretch of the river and to connect conservation land and foot trails on both sides of the river with a foot bridge.

For river access, a boat launch for small, human-powered boats such as canoes and kayaks is proposed at the end of Dale Street. The boat launch will provide a safe and formal river access point and would be a major improvement over the steep and river bank that is currently traversed by boaters.

Along with providing a formal access point to the river, the end of Dale Street is also a potential access point to two large parcels of conservation land and their corresponding foot trail networks. Town conservation land that includes Fosters Island and frontage on Poms Pond lies on one bank of the river while Andover Village Improvement Society (AVIS) conservation land of the Vale Reservation lies on the other bank. The two large conservation parcels are separated by the river, with no connection available between the two. An approximately 70 foot long foot bridge would provide that connectivity and would be an incredible asset to the large numbers of recreational users of these parcels.

Several meetings have been held with the Ballardvale community and neighboring businesses about the bridge proposal, and this idea has strong local support. Grant funding from various sources is being pursued to potentially offset costs associated with this project

Project Justification and Purpose:

This project will require close coordination with Municipal Services as it may be necessary to make associated improvements to Dale Street.

Cost Estimate & Timing:

Total Request – \$165,000 over two fiscal years for engineering and design, construction, and related services for a new boat launch and foot bridge.

COMMUNITY DEVELOPMENT & PLANNING

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 and FY20.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$15,000	\$15,000
2020	\$150,000	\$150,000



Draft
conceptual
sketch of
potential
footbridge
location.

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Castle Heights ADA Accessible Area*

CDP-8

Department Priority Ranking: 8
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$15,000
Original Dept. Request: \$15,000
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

The Castle Heights Conservation Area, located along the Shawsheen River, is an area easily accessible by wheelchair with parking available. With the removal of the Marland Place Dam, there is an increase in fish migration, wildlife habitat and demand for enjoyment of the river. This project would include construction of a handicapped accessible picnic and fishing area with a wheelchair accessible picnic table and an area to safely access the edge of the river.

The eventual goals for this project are three-fold. Funding in the amount of \$5,000.00 is sought for the design and layout of the project by a Landscape Architect. This will allow us to visualize the entire project and make any necessary adjustments to the design. Funding in the amount of \$10,000.00 will be needed for permitting of the project, including a 40' 1 Water Quality. Funding in the amount of \$25,000.00 for the construction of the picnic and fishing area, ramps, picnic table and a small wall along the river to access the river's edge and fish from 4-5 feet above the water.

Project Justification and Purpose:

Conservation is working towards making more conservation areas ADA accessible and this project would allow wheelchair access to the Shawsheen River for fishing and enjoyment of the wildlife. The project seeks to prepare the design and layout; permitting for the project and construction of the project.

Cost Estimate & Timing:

Total Request - \$15,000 in FY19 and \$25,000 in FY20

Estimated Annual Cost or Savings of Operation and Maintenance:

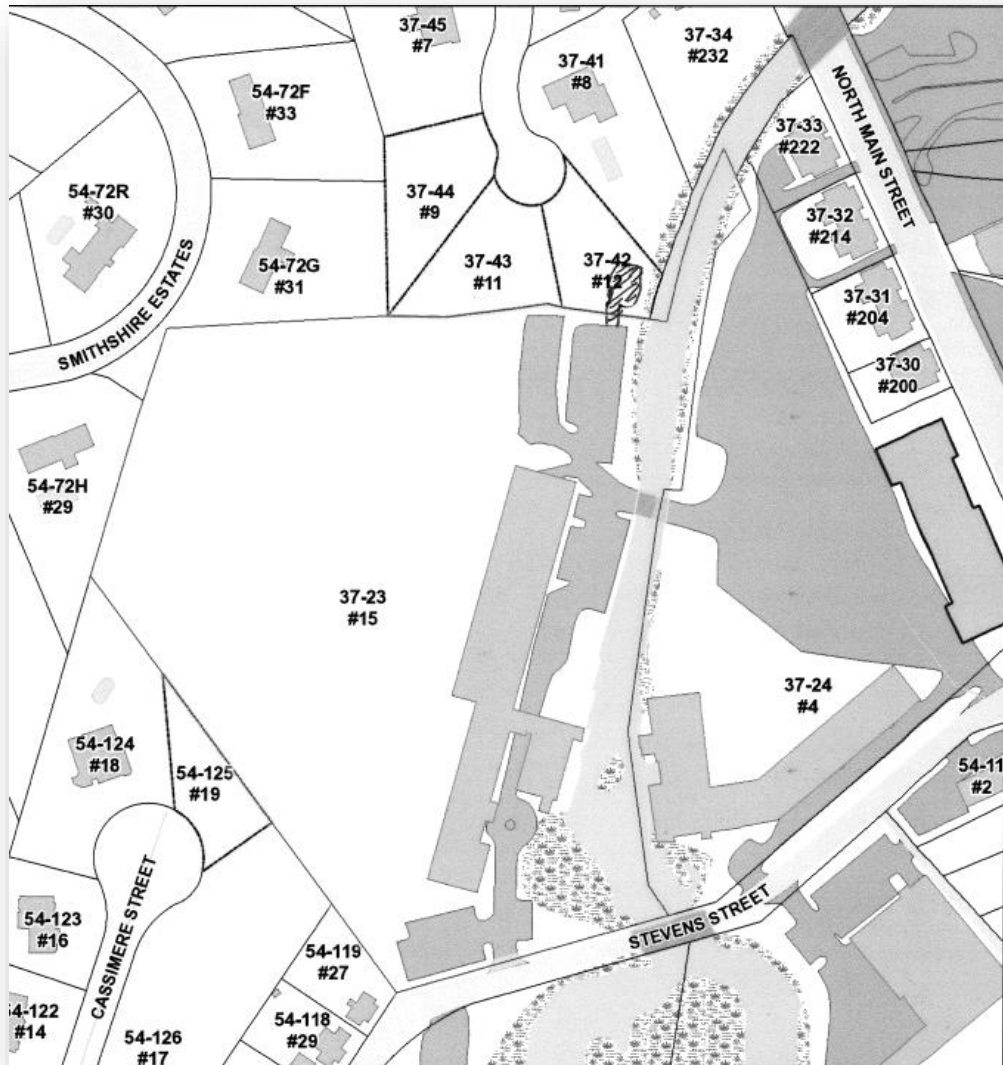
Estimated cost of \$300 per year for maintenance and upkeep supplemented by volunteer work.

Town Manager's Recommendation & Priority Ranking:

The Town Manager supports funding this request for FY19 and FY20.

COMMUNITY DEVELOPMENT & PLANNING

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$15,000	\$15,000
2020	\$25,000	\$25,000



The proposed site is located on Parcel 37-42 shown above.

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Bowling Green Feasibility Study – Development*** **CDP-9**
Strategic Plan to Enhance Community Space

Department Priority Ranking: 9
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY20 Request
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

The Bowling Green feasibility study will guide future improvements and redevelopment to municipal land, the existing abandoned municipal structure and abutting street network, with the goal of balancing the historic character of Shawsheen Village; its use as a community gathering place; its strategic location adjacent in the Shawsheen River; and its unique blend of both passive and active recreational spaces.

Project Justification and Purpose:

The project would seek to: Perform a feasibility study that will seek to enhance the historic character of Shawsheen Village by developing a suite of options that will improve pedestrian and vehicular safety along Haverhill Street and Balmoral Street, create a dynamic community space in Shawsheen Village, develop options for adaptive reuse of the existing municipal structure, while expanding recreational opportunities within the Bowling Green & adjacent Shawsheen River.

This project is intended to build off the momentum of the Shawsheen Renaissance Project, which had identified public reinvestment in the Bowling Green.

Cost Estimate & Timing:

Total Cost Feasibility Study \$20,000, Design Services \$TBA, Construction \$ TBA

Town Manager's Recommendation:

The Town Manager supports funding this request for FY20 and FY21.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2020	\$20,000	\$20,000
2021	\$100,000	\$100,000

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Haggetts Pond Accessible Rail Trail***

CDP-10

Department Priority Ranking: 10
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY20 Request
Submitted by: CD&P
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

Design, permitting for the Haggetts Pond accessible rail trail.

Project Justification and Purpose:

This Town's Haggetts Pond reservoir is a scenic location directly adjacent to a former rail line. The railway is currently a stone dust packed trail. The goal is to improve the current path to be a fully inclusive trail for all town residents. The flat nature of the existing rail-trail is ideal for this, the leveling required would be minimal. A small two-car parking for handicapped only vehicles would be added. The proposed funding will include Data gathering, Survey and Delineation, Zoning and Permit Review, Schematic design, Design Review, and Site Work Construction and Bidding Documents.



Cost Estimate & Timing:

Start Up \$15,000 design and feasibility. Construction, permitting, leveling \$150,000.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

The Town Manager supports funding this request for FY20 and FY21.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2020	\$15,000	\$15,000
2021	\$150,000	\$150,000

COMMUNITY DEVELOPMENT & PLANNING

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Conservation Land Management*

CDP-11

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$12,000
Original Dept. Request: \$12,000
Submitted by: Conservation
Department: CD&P
Funding Source: General Fund Revenue

Project Description:

Annual budget for maintenance, surveying, land management, security gates and other improvements to foster the use of land currently owned by the Town and under the care and custody of the Conservation Commission.

Project Justification and Purpose:

The requested funds will allow the Town to manage and preserve the 2000 acres of open space and conservation lands.

Cost Estimate & Timing:

\$12,000 per year

Estimated Annual Cost or Savings of Operation and Maintenance:

\$12,000

Town Manager's Recommendation:

Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$12,000	\$12,000
2020	\$12,000	\$12,000
2021	\$12,000	\$12,000
2022	\$12,000	\$12,000
2023	\$12,000	\$12,000

DEPARTMENT OF COMMUNITY SERVICES



DEPARTMENT OF COMMUNITY SERVICES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Center at Punchard – Design Services/Construction* CS-1

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$160,000
Original Dept. Request: \$160,000
Submitted by: Joseph Connelly
Department: Community Services/ES
Funding Source: General Fund Borrowing

Project Description:

A building feasibility study was funded in FY18 for this project. The study is currently underway and the results are anticipated, including cost estimates, in January 2018. The study will identify a comprehensive list of needs, upgrades and repairs for the Center at Punchard focusing on customer service enhancements, accessibility improvements and ADA compliance upgrades.

The Design Services portion of the project will then capture the results of the feasibility study and prepare designs for the project.

Project Justification and Purpose:

In the Andover Facilities Master Plan prepared by MGT of America consulting, the Center at Punchard was one of six facilities categorized in the highest priority need of improvements. The current facility is an aging facility and does not adequately meet the current needs of our Andover Seniors.

Cost Estimate & Timing:

Total Cost Design Services - \$160,000
Construction - \$2,500,000
Total Project - \$2,660,000

According to the Andover Facilities Master Plan the costs estimates for improving the Center at Punchard were \$1,732,600. The amount has been increased for inflation to \$2,500,000 for FY20. The feasibility study is currently underway with results due in January, 2018. We are requesting \$160,000 for design services in FY19. The design service fee is approximately 10% of the estimated construction cost. It is anticipated that construction will take place in FY20. The remaining amount of the project is being requested in FY20.

Estimated Annual Cost or Savings of Operation and Maintenance:

The study is a one-time cost and should have no additional cost and/or savings on current operations or maintenance. The results of the study will impact future capital costs.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 and FY20.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$160,000	\$160,000
2020	\$2,500,000	\$2,500,000

DEPARTMENT OF COMMUNITY SERVICES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Design Services for Rec Park/Pomps Pond
Master Plan*

CS-2

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$35,000
Original Dept. Request: \$35,000
Submitted by: Joseph Connelly
Department: Comm Serv/Recreation
Funding Source: General Fund Revenue

Project Description:

Design Services for master plan and future improvements for Rec Park and Pomps Pond including necessary ADA upgrades. Estimate includes anticipated necessary survey work.

Project Justification and Purpose:

Rec Park and Pomps Pond are the main outdoor facilities for all Andover Recreation outdoor activities and they are the only facilities under the jurisdiction of the Recreation Division. Despite their heavy use by the residents of Andover both of these facilities have many components that do not meet ADA compliance requirements. There are a variety of play experiences and park components, including Tennis Courts, Pickle Ball Courts and Ball Fields that have significant access issues for many residents. This study would evaluate bringing the various components of Rec Park and Pomps Pond up to a best practice compliance standard. The master plan will also investigate the need for other site improvements to the current activity spaces, possible expansion of additional recreational areas and spaces and the flow and connectivity between these areas.

The results of this master plan will be the foundation for the majority of future capital improvement projects for the Recreation Division.

Cost Estimate & Timing:

This project would begin as soon as funding is available. The project would be completed by the spring of FY19.

Estimated Annual Cost or Savings of Operation and Maintenance:

This is a one-time cost and should have no additional cost or savings on current operations and/or maintenance. It will be the foundation for future capital improvements requests.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$35,000	\$35,000

DEPARTMENT OF COMMUNITY SERVICES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Recreation Division 15 Passenger Bus*

CS-3

Department Priority Ranking:

(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0

Original Dept. Request: \$76,000

Submitted by: Joseph Connelly

Department: Comm Serv/Recreation

Funding Source: General Fund Revenue

Project Description:

Recreation Division 15 Passenger Bus

Project Justification and Purpose:

The Recreation Division is currently renting a 15 passenger van for its summer youth outer limits program which is held over several weeks during the summer. The popularity of the program continues to rise with over 166 youth participating this past summer. Although Andover Youth Services and Andover Elder Services have similar vehicles that the Recreation can use on occasion, the time of day the three divisions use their vehicles are the same, making a shared use of the existing vehicles difficult. By purchasing their own vehicle Recreation will also have year round access as compared to vehicle use for only several weeks. This vehicle would be available for other town divisions and departments to utilize when not in use by the Recreation Division.

Cost Estimate & Timing:

The vehicle would be purchased as soon as funding is available.

Estimated Annual Cost or Savings of Operation and Maintenance:

There will be maintenance costs associated with the purchase of any vehicle. All maintenance costs will be paid for out of the respective revolving fund.

Town Manager's Recommendation:

The Town Manager does not support this funding request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$76,000	\$0

DEPARTMENT OF COMMUNITY SERVICES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Storage Shed for Cormier Youth Center*

CS – 4

Department Priority Ranking:

(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0

Original Dept. Request: FY20 Request

Submitted by: Joseph Connelly

Department: Comm Serv/Youth Serv

Funding Source: General Fund Revenue

Project Description:

Outdoor Storage Shed for Cormier Youth Center

Project Justification and Purpose:

The Cormier Youth Center has been open for nearly two years. Although this state of the art facility has everything an Andover youth could ask for the one thing it does not have is adequate storage space. Currently the space that is dedicated to be a youth workshop, theater/studio and fitness area is being used as a storage area for tables, chairs, theatrical equipment and props, field lining equipment and various pieces of machinery.

The Director of Andover Youth Services has identified an area in the Playstead that is currently not being utilized as a desired location for the proposed storage shed. The Park, Playstead and Municipal Complex will be undergoing a master plan this fall. The exact location of the shed will be determined as part of this master plan process.

Final approval for the location and placement of any storage shed must be reviewed by the Town Manager and the Andover School Committee prior to any purchase being made.

Cost Estimate & Timing:

Total Cost - \$60,000

No purchase will be made until the Park, Playstead and Municipal Complex master plan is complete and all relevant Town approvals are in place. Anticipated purchase and installation would be during the Fall of 2019.

Estimated Annual Cost or Savings of Operation and Maintenance:

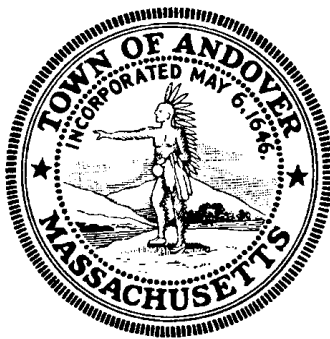
There will be additional electricity expenses associated with the shed.

Town Manager's Recommendation:

The Town Manager supports this funding request for FY20.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2020	\$60,000	\$60,000

POLICE DEPARTMENT



POLICE DEPARTMENT

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Police Vehicle Replacement**

POL-1

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$195,000
Original Dept. Request: \$215,000
Submitted by: Patrick Keefe, Chief
Department: Police Department
Funding Source: General Fund Revenue

Project Description:

- Replace 5 Police Vehicles
- 4 Marked and 1 Unmarked

Project Justification and Purpose:

Generally marked cruisers are replaced every three years and unmarked cruisers and special utility vehicles are replaced every 5-6 years. The determination as to which vehicles are traded in each year is made on a case by case basis depending on the mileage, hours of use and the overall condition of the vehicle. Purchase of these vehicles will allow the Department to continue with the rotational replacement program and avoid major repair costs and downtime.

Cost Estimate & Timing:

\$215,000 per year

Estimated Annual Cost or Savings of Operation and Maintenance:

Varies by vehicle

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$215,000	\$195,000
2020	\$215,000	\$215,000
2021	\$225,000	\$225,000
2022	\$225,000	\$225,000
2023	\$235,000	\$235,000

POLICE DEPARTMENT

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Mobile Computer Hardware*

POL-2

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$55,077
Original Dept. Request: \$55,077
Submitted by: Patrick Keefe
Department: Police
Funding Source: General Fund Revenue

Project Description:

Upgrade remaining eleven police cruisers with new computer hardware and mounts.

Project Justification and Purpose:

Over the last eighteen months, the Police Department has upgraded the mobile communications of all the line vehicles in the fleet. Five of the cruisers have also upgraded to new mobile computers through the regular operating budget. The level of equipment in the additional eleven cruisers need to be brought up to date as they are using older operating systems and it's starting to affect operations.

Cost Estimate & Timing:

11 PatrolPC RhinoTab computers, with keyboards	\$5,007 each	\$55,077 total
3 year computer warranty		
3 year Rhino Dock warranty		
Windows 10 Pro 64		
Shipping and Installation		

Estimated Annual Cost or Savings of Operation and Maintenance:

No annual costs will be incurred. As several of the older computers are out of warranty, there may be savings with hardware maintenance.

Town Manager's Recommendation:

The Town Manager supports this funding request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$55,077	\$55,077

POLICE DEPARTMENT

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Parking Study Implementation***

PRK-1

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY18:
Original Dept. Request: \$75,000
Submitted by: Patrick Keefe
Department: Police Department
Municipal Svcs & PIC
Funding Source: Parking Funds

Project Description:

Infrastructure Recommendations for downtown Andover from the 2016 Downtown Parking Study as recommended by the Parking Implementation Committee.

Project Justification and Purpose:

In 2015, the Economic Development Council embarked on a comprehensive analysis of Andover's parking situation in downtown and how it potentially affected the growth of downtown Andover. A final report was submitted to the Town of Andover by the consultant Nelson Nygaard in January 2016. The report outlined seven key recommendations that would improve the parking utilization in downtown Andover.

Andover has an opportunity to implement an improved parking management system that responds to the identified needs and concern of its users. It is important for the users of downtown (i.e. current and future business owners, customers, visitors, employees, etc.) to anticipate that there is available convenient parking. New businesses take parking into consideration when deciding on a new location. Customers take parking into consideration when deciding where to eat or shop. The Economic Development Council strongly believes that teaming with the Department of Municipal Services and the Andover Police Department, positive changes can be made to downtown that will increase customers, assist with business retention and stimulate downtown growth.

Findings that require funding through the Capital Improvement Program include the parking payment technology (it is mismatched with appropriate parking strategies and some payment systems are outdated), wayfinding (signage is inconsistent and substandard), and creating additional parking spaces (may be created with a reconfiguration of the existing Park Street East parking lot).

Specifically, the recommendations in the Downtown Andover Parking Study include:

- **Recommendation 1: Provide Clear Signage and Information.** Andover will provide clear signage and information to its visitors with better wayfinding signage. Many communities with downtowns like Andover, have wayfinding signage which uses visual information to create a positive first impression for visitors and foster a sense of place for residents. Studies show that clear wayfinding for parking, shopping and sights improves pedestrian traffic in downtowns, encourages more dollars spent and increases tourism by directing visitors to nearby points of interest.
- **Recommendation 4: Customer Friendly Parking Technology.** Paying for parking should be the least difficult aspect of visiting downtown. Parking payment technology should be consistent and user friendly in all areas wherever payment is required.
- **Recommendation 5: Strategic Supply Optimization.** Andover currently has several municipal parking lots. One in particular, the Park Street East lot, could be reconfigured and restriped to be used more efficiently adding public parking spaces in the downtown. Each parking space added could add approximately \$1200 per space per year to the parking revenues at the same time adding to the inventory of public parking spaces.

POLICE DEPARTMENT

- Recommendation 6: Improvements to the Downtown Environment. Simple improvements such as installing additional bike racks around downtown will help to promote downtown as accessible by other means of transportation and potentially free up parking spaces.

Cost Estimate & Timing:

This funding will be used towards replacement and new parking technology. Bid results for a new parking technology system will be considered in early November.

Estimated Annual Cost or Savings of Operation and Maintenance:

Based on today's rates, each parking space in the municipal lot that is created, could generate at least \$500 per space per year in revenue (based on the existing Parking Sticker Program rates).

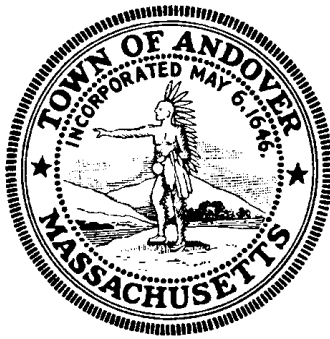
Town Manager's Recommendation:

Town Manager supports funding this request from Parking Funds for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$75,000	\$75,000
2020	\$75,000	\$75,000
2021	\$75,000	\$75,000
2022	\$75,000	\$75,000
2023	\$75,000	\$75,000

POLICE DEPARTMENT

FIRE RESCUE



FIRE RESCUE

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Fire Rescue Vehicles*

FR-01

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec for FY19: \$0 (Move to FY20)
Original Dept. Request: \$1,100,000
Submitted by: Chief M. Mansfield
Department: Fire Rescue
Funding Source: General Fund Borrow

Project Description:

Replace the following vehicles:

FY19

1999 KME Tower Ladder – Ladder 2

FY20

2009 International 400 SER Ambulance 4

2004 Ford Pick-up – Forestry 2

FY21

2001 Kovatch Motor Equipment Excel - Engine 2

2011 Chevrolet Tahoe - Car 3

FY22

2011 International 4300 Ambulance – Ambulance 3

FY23

2013 Chevrolet Tahoe – Car 1

Project Justification and Purpose:

FY19

1999 KME Tower Ladder – Ladder 2

This aerial ladder has served as the reserve aerial for Andover Fire Rescue since 2005. Prior to then the aerial was a front line piece of apparatus. This reserve ladder is pressed into “front line” service (approximately sixty days annually) whenever Ladder 1 is out of service due to mechanical malfunctions, preventative maintenance or when Ladder 1 has been requested to respond to another community for mutual aid. This apparatus is becoming extremely difficult to maintain due to the inability to locate replacement parts from the manufacturer. Most parts are special order if they are available and can take up to 4-7 weeks to receive delivery on.

FY20

2009 International SER - Ambulance 4

This ambulance is a front line ambulance that is utilized more than any other vehicle with the exception of Ambulance 1. This vehicle was utilized as a front line response vehicle for five years and serves as a back line reserve vehicle and is placed back into front line status when required due to preventative maintenance or mechanical malfunctions of the current front line response ambulances

The current vehicle will be traded in to offset some of the purchase costs of the replacement vehicle. Because these ambulances are operating much of the time, they are utilized as front line vehicles and then

FIRE RESCUE

when replaced put into a back-up vehicle status for additional years of service.

The entire community of Andover will benefit from this project by having reliable and efficient apparatus to meet the needs of those who require EMS services. The consequences of deferring this project will result in increased unreliability, decreased organizational efficiency and an increase in maintenance costs.

2004 Ford Pick-Up – Forestry 2

Forestry 2 is housed at the West Fire Station and serves as one of two forestry firefighting vehicles within the fleet. This apparatus responds to brush or wildland fires within the community and also serves as a utility truck when performing at rescue responses that require lengthy extrications of injured people in wooded areas and those areas that pose access challenges.

FY21

2001 KME Excel – Engine 4

Engine 2 is scheduled to be replaced in FY 18. This vehicle will be 20 years old and will be utilized as the reserve engine for several additional years once replaced.

2011 Chevrolet Tahoe – Car 3

Car 3 was originally Car 1 for a short period of time and was then designated as Car 3 as the result of the vehicle needing replacement due to repair costs and transmission issues. This vehicle is assigned on a daily basis to the Fire Prevention Officer so that he can perform the required inspections on a daily basis. This vehicle is utilized as a secondary staff vehicle during the Fire Prevention Officers' off duty hours when needed.

FY22

2011 International 4300 – Ambulance 3

This ambulance is currently a reserve ambulance that is utilized when one of the front line ambulances is out of service. This ambulance is due to be replaced this year and is the oldest vehicle in the fleet. It will be traded in to offset some of the purchase costs of the replacement vehicle. Because these ambulances are operating much of the time, they are utilized as front line vehicles and then when replaced put into a back-up (reserve) vehicle status for additional years of service.

The entire community of Andover will benefit from this project by having reliable and efficient apparatus to meet the needs of those who require EMS services. The consequences of deferring this project will result in increased unreliability, decreased organization efficiency and an increase in maintenance costs.

FY23

Chevrolet Tahoe – Car 1

This vehicle is assigned on a daily basis to the Fire Chief so that he can perform the required duties on a daily basis.

Cost Estimate & Timing:

FY19

- **Tower Ladder – Ladder 2**

\$1,100,000 based on specifications developed by the Fire Department Apparatus Committee through a needs analysis and the annual manufacturer cost increases based on EPA emissions updates, National Fire Protection Standards, and the increase in steel and technology upgrade costs.

FY20

- **2009 International 400 SER Ambulance 4**

\$300,000 based upon current bid specifications as arranged by EMS Apparatus Committee and current NFPA standards. The cost will also allow for the replacement of the stretcher and other costly aged equipment.

- **2004 Ford Pick-Up with forestry firefighting skid unit – Forestry 2**

FIRE RESCUE

\$75,000 cost to replace the forestry/wildland incident response vehicle and the skid unit (pump, water tank, hose etc.) that is approximately 32 years old.

FY21

▪ **2001 KME Excel – Engine 4**

\$700,000 based on specifications developed by the Fire Department Apparatus Committee and the annual manufactures cost increases based on EPA emissions updates, and the increase in steel and technology costs.

▪ **2011 Chevrolet Tahoe – Car 3**

\$60,000 based upon current bid specifications and consistency of fleet for warranty, ease of replacement parts and repairs.

FY22

▪ **2011 International 4300 – Ambulance 3**

\$305,000 based upon current bid specifications as arranged by EMS Apparatus Committee and current NFPA standards.

FY 23

▪ **2013 Chevrolet Tahoe**

\$60,000 based upon bid specifications as arranged by the vehicle committee.

Estimated Annual Cost or Savings of Operation and Maintenance:

All of the vehicle replacements are recommended based upon the Andover Fire Rescue vehicle replacement schedule developed in 2007 and revised in 2015. The replacement schedule was formulated so that Andover Fire Rescue could forecast their vehicle replacements based on industry standards and the overall use of the specific vehicles within the fleet. These replacements are usually necessary based upon their lack of reliability, firefighter safety, cost of maintenance, and technology upgrades. However each apparatus replacement is reviewed on a case by case basis.

Engines are scheduled to be replaced every twenty (20) years.
Ladders are scheduled to be replaced every twenty (20) years.
Ambulances are scheduled to be replaced every ten (10) years.
Staff vehicles are scheduled to be replaced every ten (10) years

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23 as noted below:

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,100,000	\$0
2020	\$375,000	\$1,100,000
2021	\$760,000	\$375,000
2022	\$305,000	\$760,000
2023	\$60,000	\$305,000

FIRE RESCUE

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Communication Fire Alarm Receivers*

FR-02

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$84,000
Original Dept. Request: \$84,000
Submitted by: Chief Michael B. Mansfield
Department: Fire Rescue
Funding Source: General Fund Revenue

Project Description:

Andover Fire Rescue is requesting \$84,000 to replace the Andover Fire Rescue Communications Alarm Receivers that have been in service since 2002.

Project Justification and Purpose:

The requested funding is necessary for this project due to the age and reliability of the existing equipment. This equipment monitors most of the fire alarm systems that are part of internal fire alarm and detection systems in place in housing, specialized health care, commercial and industrial occupancies throughout the Town of Andover.

These systems are the “first line of defense” in these buildings and notify Andover Fire Rescue of a fire related issue around the clock. Due to the age of the current equipment, the installation of newer technology will result in decreased response times, lower maintenance costs and the elimination of unnecessary equipment in the Public Safety Communications Center.

If this project is deferred the current equipment will need a complete overhaul and may still not be as reliable as the latest technology available which could lead to the potential for fire alarms not being received.

Cost Estimate:

The \$79,000 cost includes the installation of the following:

- 2 – System Processor Servers
- 2 – 22’ Monitors and User Interfaces
- 2 – Radio Modules
- 2 – Charger Modules
- 5 – Dispatcher Client Work Stations with 22’ monitors
- 2 – Ethernet Routers
- 4 – Batteries
- 2 – Low band antennas and tubes

Estimated Annual Cost of Operation and Maintenance:

The cost of operation and maintenance of this equipment will be reduced to approximately \$25.00 annually

Town Manager’s Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$84,000	\$84,000

FIRE RESCUE

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Floor Covering Replacement***

FR-03

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: \$36,800
Submitted by: Chief Michael B. Mansfield
Department: Fire Rescue
Funding Source: General Fund Revenue

Project Description:

Andover Fire Rescue is requesting \$36,800 to replace several areas of floor covering within the headquarters fire station.

Project Justification and Purpose:

The requested funding is necessary for this project due to the age and wear experienced with the current floor coverings. The current floor coverings Andover Fire Rescue is seeking to replace are original and 15+ years old. The office floor coverings have several rips and tears in them that have rendered the floor covering a tripping hazard.

The dormitory and day room floor coverings are soiled to a point they do not come clean and are a health hazard. They will be replaced with a low maintenance alternative that should wear much better and resist staining from spills that currently exists.

Cost Estimate:

The \$36,800 cost includes the removal and disposal of old carpet, floor preparation, moving of furniture and installation of the following:

84 Square Yards in office area

82 boxes of Vinyl planking in 12 dormitory rooms

New cove base in all areas

Estimated Annual Cost of Operation and Maintenance:

Maintenance costs will be less than \$25 annually.

Timing and Financing:

If approved, the entire project will be completed within the first quarter of the FY 2019 budget.

Town Manager's Recommendation:

The Town Manager does not support funding this request.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$36,800	\$0

FIRE RESCUE

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Bi-Directional Amplifier System***
High Plain/Wood Hill Elementary Schools

FR-04

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$130,000
Original Dept. Request: \$130,000
Submitted by: Chief Michael B. Mansfield
Chief Patrick Keefe
Department: Andover Public Safety
Funding Source: General Fund Revenue

Project Description:

Andover Fire Rescue and the Andover Police Department are seeking \$130,000 in funding for the design and installation of a Bi Directional Amplifier System in the High Plain Middle School and the Wood Hill Elementary School.

Project Justification and Purpose:

Bi-Directional Amplifier Systems are two way radio communications boosters that amplify or repeat critical first responder radio transmissions within a facility. This equipment also allows a facility to become compliant with the Emergency Responder Radio Coverage Code (ERRC) which applies to radio transmission enhancement systems that are mandated under the National Fire Protection Association (NFPA 72 Chapter 24).

When installed, this equipment will boost the signal strength of all Public Safety emergency communications throughout both schools. Currently, there are very large gaps in signal coverage that are created by not only the buildings envelope as it was constructed but also due to the topography that exists in areas surrounding the school. In any emergency situation, these gaps will not allow for seamless, efficient and safe fire, police or EMS communications.

If funded, this system will be the third and fourth installed within the Andover Public School system. In FY 2017 a BDA system was designed and installed within Andover High School. In FY 2018 a like system will be installed at the Bancroft Elementary School.

Cost Estimate:

\$125,000 to cover the cost of the testing, design and installation of a Bi-Directional Amplifier system in the two schools.

Estimated Annual Cost of Operation and Maintenance:

Maintenance costs will be less than \$100.00 annually

Timing and Financing:

If approved, the entire project will be completed within the first quarter of the FY 2019 budget while the children are on their summer vacation break.

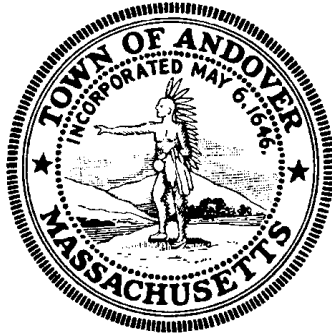
Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$130,000	\$130,000

FIRE RESCUE

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Major Annual Road Maintenance**

DPW-1

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$1,364,729
Original Dept. Request: \$1,364,729
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: State Chapter 90 Funds

Project Description:

To provide major maintenance and repairs to town roads and bridges as allowed under the Chapter 90 State Aid Highway Guidelines adopted by the MA Public Works Commission including but not limited to reconstruction, resurfacing, engineering, sidewalks, traffic control or any other allowable transportation related expenses.

Actual roads that will receive treatment are determined subsequent to an annual review and evaluation by Department of Public Works personnel, approval by Massachusetts State Aid Office and coordination with water and sewer construction schedules to avoid street cuts into newly paved streets.

Project Justification and Purpose:

New roads have an expected life of 20 to 25 years before major maintenance is required. Costs are less the earlier this maintenance can be accomplished plus the public gains through higher property values and less wear and tear on vehicles and fewer damage claims.

Cost Estimate & Timing:

\$1,364,729 estimated per year at current state allocation.

Estimated Annual Cost or Savings of Operation and Maintenance:

N/A

Town Manager's Recommendation:

The Town Manager supports department's proposed use of Chapter 90 funds for this purpose.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,364,729	\$1,364,729
2020	\$1,364,729	\$1,364,729
2021	\$1,364,729	\$1,364,729
2022	\$1,364,729	\$1,364,729
2023	\$1,364,729	\$1,364,729

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Minor Sidewalk Repairs**

DPW-2

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$200,000
Original Dept. Request: \$200,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Revenue

Project Description:

This modest amount of funding will be used to make minor safety related repairs to existing Town sidewalks, using a combination of Town forces and contractors.

Project Justification and Purpose:

Minor sidewalk repairs are needed in various locations to address deteriorating surfaces for pedestrian safety and accessibility purposes.

Cost Estimate & Timing:

\$200,000 of General Fund Revenue funding for FY19 through FY23.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$200,000	\$200,000
2020	\$250,000	\$250,000
2021	\$250,000	\$250,000
2022	\$250,000	\$250,000
2023	\$250,000	\$250,000

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Road Maintenance**

DPW-3

Department Priority Ranking: 2
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: \$1,000,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Borrowing

Project Description:

Maintenance of public roads, pave (overlay) 1 1/2" of bituminous concrete of 5 miles of road per year.

Project Justification and Purpose:

The Town of Andover has approximately 200 miles of road to maintain. The average life span for a properly built road is 20 years. In order to properly maintain our roadways, 10 miles of roads will need minor to major work every year to continue with a quality road. Approximately 5 miles of roadways are repaved/reconstructed per year with a combination of the following sources: private contractors, the State with Chapter 90 funding, and the Town of Andover in conjunction with water and sewer improvements. For the past 5 years, an average of 5 miles of road are deferred per year due to the lack of adequate funding. We are now potentially in a deficit of 25 miles, or more, of paving being deferred.

In order to provide some reconstruction and maintenance to our roadway system, an additional \$1,000,000 is being requested with the anticipation of a Roadway Maintenance Program being instituted going forward.

Cost Estimate & Timing:

\$1,000,000 is the requested funding for FY 2019 for Road Maintenance.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

The Town Manager does not support funding this request.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,000,000	\$0
2020	\$1,000,000	\$0
2021	\$1,000,000	\$0
2022	\$1,000,000	\$0
2023	\$1,000,000	\$0

TOWN OF ANDOVER

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CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Storm Water Management***

DPW-6

Department Priority Ranking: 3
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY20 Request
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Revenue

Project Description:

Under the EPA National Pollutant Discharge Elimination System (NPDES) Phase II Storm Water Permit Program that was signed into law in October 1999, the Town of Andover was required to obtain a permit for our municipal storm water discharges. This required the implementation of a Storm Water Management Program (SWMP), which included a number of tasks to be accomplished to improve water quality by reducing the discharge of pollutants from storm water runoff into the local rivers, ponds, streams and other receiving water bodies. The SWMP outlined the town's plan for public education and involvement, mapping the storm drainage system, inspecting outfalls, sampling discharges, detection and elimination of illicit discharges, pollution prevention plans, management of storm water during and after land disturbance activities, and implementation of best management practices. Funds are necessary to update the SWMP to meet the new regulations for the 2nd permit term and to continue implementation of the necessary tasks.

Project Justification and Purpose:

In July 2003, Andover was issued a general permit for the first 5-year term for implementation of the SWMP. EPA initially issued draft regulations for the second 5-year permit in November 2010. Then EPA issued a revised draft permit in September 2014. Final regulations for new permit were issued in on April 4, 2016 which define the additional requirements. The 2016 regulations were to become effective starting on July 1, 2017, however this effective date was recently postponed by EPA until July 1, 2018.

To comply with the Federal mandate, the Town is required to further expand the activities of the existing permit under the new permit. This will enable Andover to meet the EPA requirements with the implementation of sound responsible storm water operation and maintenance practices, and help to protect the quality of our receiving waters.

The 2001, 2002 and 2003 Annual Town Meetings approved \$75,000 each year and ATM 2008 appropriated \$50,000 for continuing the program. An additional funding amount of \$100,000 was approved at ATM 2017 to begin the implementation of the Program requirements under the new 5-year permit term. These funds will be used to begin the work starting on the new effective date and additional funds for FY19 are not being requested due to the recent postponement by EPA. At this time, \$100,000 is projected for future years FY 2020 – 2023, however the figure may change as the updated SWMP is developed.

The cost of any major improvements, which may result from the drainage outfall inspection and system assessment and/or storm water regulations, is yet to be determined. Funds for these improvements will be needed in future years after the locations of illicit discharges have been identified and costs have been determined.

Cost Estimate & Timing:

Funds have been approved in 2001, 2002 and 2003 that have allowed the initial engineering study of the Town's facilities, operational procedures and regulations relative to the EPA requirements and for the preparation of the Storm Water Management Plan. These funds have also enabled for the implementation of the recommendations and improvements in SWMP such as installing gas/oil separators at four town buildings, necessary engineering services for outfall inspections and storm drain mapping, preparation of a

PUBLIC WORKS

storm water bylaw, and eliminating four illicit discharges that were found, and preparation of the annual report to EPA. Funds will be necessary to continue and expand the permit requirements including engineering services, system mapping, dry and wet weather sampling, annual reports, detection and elimination of illicit discharges, implementation of Good Housekeeping maintenance activities at town facilities and other necessary services, equipment and improvements. Recent drain outfall inspections have detected several locations of possible illicit connections, which are under investigation and will need to be corrected and eliminated. Funds for the construction and implementation of the storm water management program will be necessary to address other problems that are identified as the evaluation and assessment of the town's drainage system progresses. Major improvements may be needed at some point in the future. The cost of such major improvements has yet to be determined.

Estimated Annual Cost or Savings of Operation and Maintenance:

There will be additional operational costs associated with the implementation of the program. These costs will not be known until the evaluation and assessment of the town's drainage system is completed.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY20 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$0	\$0
2020	\$100,000	\$100,000
2021	\$100,000	\$100,000
2022	\$100,000	\$100,000
2023	\$100,000	\$100,000

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **DPW Vehicles**

DPW-7

Department Priority Ranking:
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: a. \$128,000 b. \$555,000
Dept. Request: a. \$128,000 b. \$555,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: a. General Fund Revenue
b. General Fund Borrowing

Dept.	Vehicle #	Year	Make/Model	FY19	FY20	FY21	FY22	FY23
Cemetery	65	2006	Chevy Silverado 1 Ton Dump		\$28,000			
Cemetery	66	2003	Ford F350 Dump 1 Ton 4X4 (Dump body only)	\$28,000				
Cemetery	67	2000	John Deere Backhoe Loader 310E				\$180,000	
Cemetery	Trailer-1	1996	Vermeer Brush Chipper (SPARE)					
Park	60	2009	Ford F350 Dump 4x2		\$40,000			
Park	61	2006	Ford F350 1 Ton Dump 4x4	\$55,000				
Park	62	2006	Ford F350 1 Ton Rack Body w/tailgate 4x2		\$55,000			
Park	63	2001	Ford F350 1 Ton Dump	\$35,000				
Park	64	2016	Ford F250, supercab					
Park	65	2015	Jacobsen JMC, HR9016T mower					\$75,000
Park	66	2012	Toro Ground Master 4700-D Mower 4x4			\$65,000		
Park	Tractor-1	1999	Kubota Tractor – Diesel					\$65,000
Tree	20	2010	Ford F150 4x4		\$28,000			
Tree	51	2012	Ford F550 2T FSH DRW w chip body			\$65,000		
Tree	52	1997	Mack Crane Platform - Diesel				\$65,000	
Tree	53	2017	Freightliner					
Tree	54	1999	GMC C Series Bucket Truck – Diesel			\$125,000		
Tree	55	2006	Kubota Tractor			\$30,000		
Tree	56	2004	Vermeer Stump Grinder		\$25,000			
Tree	57	2017	Brush Bandit Chipper 254XP Utility Trailer					
			Cemetery, Parks, Forestry Total Request	\$118,000	\$176,000	\$285,000	\$245,000	\$140,000
Dept.	Vehicle #	Year	Make/Model	FY19	FY20	FY21	FY22	FY23
Highway	1	2012	Mack Dump Truck w/2 CaCl Tanks (6wh)					\$200,000
Highway	3	2012	Mack Dump Truck w/2 CaCl Tanks (6wh)					\$200,000
Highway	4	2009	Mack Dump Truck w/2 CaCl Tanks (6wh)			\$180,000		
Highway	5	2006	Mack Dump Truck w/2 CaCl Tanks (6wh)	\$170,000				
Highway	6	2009	Mack RD Dump Truck w/2 CaCl Tanks (6wh)			\$180,000		

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Highway	7	2003	Mack RD690P Dump Truck w /Catchbasin Cleaner (6wh)					
Highway	8	2012	Mack Dump Truck w/2 CaCl Tanks (6wh)				\$190,000	
Highway	9	2005	Mack RD690 Dump Truck w/2 CaCl Tanks w/Snow Setup (10wh)	\$210,000				
Highway	10	2015	Mack RD 690P Dump Truck w/2 CACI Tanks (6wh)					
Highway	11	2013	Mack RD Dump Truck w/2 CACI Tanks (6wh)					\$200,000
Highway	12	2013	Caterpillar Wheel Loader Model 938G					
Highway	13	2008	John Deere 624J Four Wheel Loader		\$180,000			
Highway	14	2017	Ford F450, 4x4 w/Plow					
Highway	15	2009	Ford F450 1 Ton 4x4 1 ton w/ plow				\$55,000	
Highway	16	2011	Ford F450 1 Ton Supercab F47 Chassis Rack w/Plow - (new body & tailgate in FY16)					
Highway	17	2015	Ford Drwsup F450 1 Ton Dump Truck					
Highway	18	2010	Ford F150 1/2 Ton X18 139 Supercab 4x4 Pickup			\$45,000		
Highway	19	2016	Ford Escape, 4x4					
Highway	20	2017	Ford F550, 4x4 w/ plow					
Highway	21	2002	Mack RD690P Dump Truck w/2 CACI Tanks (6wh)	\$175,000				
Highway	22	2017	Mack 10-Wheeler w/2 CACI Tanks (10wh)					
Highway	23	2017	Mack 10-Wheeler w/2 CACI Tanks (10wh)					
Highway	24	2013	Ford F350, 1 Ton Regular cab 4X4 Pickup					
Highway	25	2008	Ford F450 1 Ton w/ crane & dumping body platform(NEEDS CAB & CHASSIS)			\$50,000		
Highway	26	2015	Bobcat Skidsteer 773T Loader					
Highway	27	2016	Bobcat Skidsteer S570 Loader					
Highway	28	2015	Holder Tractor C992 w/attachments					
Highway	29	2016	Holder Tractor C992 w/attachments					
Engineering	39	2013	Ford F350					
Highway	400	2000	John Deere Backhoe Loader 310SE					
Highway	51	2013	Wacker Neuson WL-30 Articulated Wheel Loader					
Highway	52	2015	Falcon Asphalt Recycler & Hot Box, Trailer Mounted					
Highway	A	2013	Compaq Riding Roller					
Highway	BOMB	2007	Sidewalk Tractor Bomb. w / "V" Plow					
Highway	B-Sweep	2013	3 Wheel Elgin Pelican Sweeper		\$200,000			
Highway	C-Sweep	2015	3 Wheel Elgin Pelican Sweeper				\$200,000	
Highway	D	2013	2013 Sullair 185CFM Air Compressor, 100psi		\$14,000			
Highway	E	1987	SRECO Utility Trailer Water					
Highway	SALPAV	2014	Salsco TP44 Sidewalk Track Paver					
Highway	Trailer 2	2004	Big Tex 12-Ton Tandem Axle Trailer		\$10,000			

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Highway	Trailer 3	2002	Town Master T-12DD Utility Trailer for Bobcats	\$10,000				
Municipal Services	WZT	2014	Work Zone Trailer, Car Mate					
			Highway Total Request	\$565,000	\$404,000	\$455,000	\$445,000	\$600,000
			TOTAL DPW	\$683,000	\$580,000	\$740,000	\$690,000	\$740,000

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$683,000	\$683,000
2020	\$580,000	\$580,000
2021	\$740,000	\$740,000
2022	\$690,000	\$690,000
2023	\$740,000	\$740,000

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019– FY2023

PROJECT REQUEST: **Minor Storm Drainage Improvements**

DPW-8

Department Priority Ranking:

(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$300,000

Original Dept. Request: \$300,000

Submitted by: Chris Cronin, Director

Department: Municipal Services

Funding Source: General Fund Borrowing

Project Description:

This project is to provide funds to address maintenance and repairs of storm drains. The specific locations to be addressed will be determined by the MS Director and staff.

Project Justification and Purpose:

To prevent further roadway deterioration, property damage, alleviate flooding, and reduce the discharge of pollutants from storm water runoff. Town Meeting has been appropriating \$300,000 every other year for storm drain improvements. This request continues to provide the funds for making improvements and repairs as they become necessary.

Cost Estimate & Timing:

Projects will be done as necessary by private contractors at Town bid prices. The 2015 Annual Town Meeting approved \$300,000 which funded our latest request. These funds will be expended by the end of FY 2018.

This request continues the funding of \$300,000 for Minor Improvements.

The estimated total cost for all years shown is - \$600,000.

Estimated Annual Cost or Savings of Operation and Maintenance:

There will be some additional operational costs associated with catch basin cleaning and repair.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 and FY21.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$300,000	\$300,000
2020		
2021	\$300,000	\$300,000
2022		
2023		

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Town Bridge Evaluation & Maintenance***

DPW-9

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY21 Request
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Borrowing

Project Description:

To provide for minor repairs, rehabilitation, and reconstruction of Town-owned bridges according to Massachusetts Department of Transportation specifications. The MassDOT routinely inspects the Town owned bridges and issues reports citing any deficiencies in the bridge structures. There is an ongoing need to rehab bridge abutments, place scour protection and make other repairs as necessary for the following town owned bridges on the Shawsheen River: Essex Street Bridge; Andover Street Bridge; Stevens Street Bridge; Balmoral Street Bridge; and Central Street Bridge. An engineering evaluation is necessary to identify, recommend and design mitigation methods and rehab alternatives.

Project Justification and Purpose:

Improvements were made in 2009 and 2010 to the Balmoral Street and Stevens Street Bridges to address deficiencies that were previously detected. Future requests will continue to help fund necessary assessments and repairs to the Town owned bridges. Recent reports from MassDOT indicate minor deficiencies on each bridge. Inspections have been performed on the Essex Street and Central Street bridges. A further evaluation on the Essex Street Bridge has determined the stone arch is stable and repairs are not necessary at this time. Conditions will be monitored on all Town owned bridges and repairs made as needed in the future.

Cost Estimate & Timing:

Amount to be determined includes engineering, design and construction to repair identified deficiencies as needed. Evaluations, repairs and rehabilitation will be determined and additional funds requested in future years as necessary to supplement available funds remaining. Funding options for major repairs will also be sought through available state bridge programs.

Estimated Annual Cost or Savings of Operation and Maintenance:

N/A

Town Manager's Recommendation:

The Town Manager supports funding this request in FY21.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019		
2020		
2021	\$500,000	\$500,000
2022		
2023		

TOWN OF ANDOVER

PUBLIC WORKS

CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Reconstruction of Existing Sidewalks***

DPW-10

Department Priority Ranking: 2
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$0
Dept. Request: \$1,156,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Borrowing

Project Description:

The Town Manager and the Board of Selectmen formalized a Sidewalk Master Plan in 2001, which establishes guidelines for the construction and reconstruction of sidewalks. The Plan also sets priorities, provides for public input on design issues, and programs construction timing based on a number of factors, including the availability of funds. The plan calls for the reconstruction of existing sidewalks with granite curbing especially in the downtown area. Town sidewalks need to conform to the American with Disabilities Act requirements especially regarding curb cuts, width, slope, etc. Disabled people use sidewalks in the downtown area and the old sidewalks need to be repaired as soon as possible. Sidewalks near the schools and in the Shawsheen and Ballardvale areas are also in need of repairs to provide safe pedestrian travel.

Project Justification and Purpose:

The Town has over fifty (50) miles of existing sidewalks. Many of the sidewalks are old, broken, cracked or uneven and in need of serious repair or lack granite curbing. Also many of the sidewalks do not conform to the ADA requirements. Approximately 23 miles are in need of reconstruction. Major funding for sidewalks has been deferred in past years as part of an overall reallocation of capital appropriations towards maintaining School and Town services. Funds for full reconstruction have not been allocated since 2006. In the Spring of 2004 Andover conducted a Citizens Survey of a representative sampling of town residents to assess the level of community satisfaction with a wide variety of Town services. Sidewalk maintenance received one of the lowest ratings of the 55 areas rated.

Cost Estimate & Timing:

Reconstruction costs have increased based upon current construction costs. The cost estimate to reconstruct all 23 miles of remaining sidewalks in Andover is \$19,438,000. Costs include removing existing sidewalk, installing new sidewalk, granite curb, trees and handicap ramps. Following is the itemized cost to follow the Sidewalk Master Plan:

<u>Street Name</u>	<u>Street Section</u>	<u>Estimated Replacement</u>
<u>FY2019</u>		
Canterbury Street	Lowell Street to Stafford Lane	395,000
Central Street	Essex Street to Brook Street	143,000
North Main Street	Windsor Street to Kenilworth Street	273,000
	Kensington Street to Magnolia	
Poor Street	Avenue	143,000
Riverina Road	Kenilworth Street to Haverhill Street	202,000
		<u>\$1,156,000</u>
<u>FY2020</u>		
Argyle Street	Haverhill Street to Burnham Road	317,000
Arundel Street	Balmoral Street to Burnham Road	340,000

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Balmoral Street	North Main Street to end	571,000
Carisbrooke Street	Burnham Road to Balmoral Street	295,000
York Street	Burnham Road to Haverhill Street	316,000
		<u>\$1,839,000</u>

FY2021

Ballardvale Road	Enfield Drive to Wyncrest Circle	72,000
School Street	Ridge Street to Central Street	132,000
Summer Street	Avon Street to Whittier Street	321,000
		<u>\$525,000</u>

FY2022

Essex Street	Red Spring Road to Central Street	527,000
Florence Street	Elm Street to Park Street	186,000
Kenilworth Street	North Main Street to Poor Street	113,000
Wolcott Avenue	Walnut Avenue to Elm Street	379,000
		<u>\$1,205,000</u>

FY2023

Brook Street	Essex Street to Central Street	217,000
Burnham Road	High Street to Dufton Road	161,000
Chestnut Street	Morton Street to Sherry Dr	178,000
Pearson Street	Essex Street to Safety Center	124,000
		<u>\$680,000</u>

Total \$5,405,000

Estimated Annual Cost or Savings of Operation and Maintenance:

Project to be done by private contractors.

Town Manager's Recommendation:

The Town Manager does not support funding this request.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,156,000	\$0
2020	\$1,839,000	\$0
2021	\$525,000	\$0
2022	\$1,205,000	\$0
2023	\$680,000	\$0

TOWN OF ANDOVER

PUBLIC WORKS

CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *New Sidewalk Construction*

DPW-11

Department Priority Ranking: 2

(1 = highest, 2 = next highest, etc.)

TM Rec for FY19: \$0

Original Dept. Request: \$1,073,000

Submitted by: Chris Cronin, Director

Department: Municipal Services

Funding Source: General Fund Borrowing

Project Description:

The Town Manager and the Board of Selectmen formalized a Sidewalk Master Plan in 2001, which establishes guidelines for the construction and reconstruction of sidewalks. The Plan also sets priorities, provides for public input on design issues, and programs construction timing based on a number of factors, including the availability of funds. This request shows the five-year plan for construction of new sidewalks in accordance with the priorities established by the Sidewalk Master Plan. The Sidewalk Master Plan gives priority to constructing sidewalks on at least one side of many streets within one mile of a school or other municipal facility, which generates heavy pedestrian traffic. It is estimated that this would entail the construction of twenty-one (21) miles of new sidewalks. Final locations will be determined by the School Department, Planning Department and the Department of Public Works.

Project Justification and Purpose:

Major funding for sidewalks has been deferred in past fiscal years as part of an overall reallocation of capital appropriations towards maintaining School and Town services, until 2014 when funds were approved for a new sidewalk on a portion of Holt Road and in 2015 when portions of Woburn St. and River St. were approved.

<u>Street Name</u>	<u>Street Section</u>	<u>Estimated Cost</u>
<u>FY2019</u>		
High Plain Rd.	West Elementary to Greenwood Rd.	1,073,000
		<u>\$1,073,000</u>
<u>FY2020</u>		
Woburn St.	Abbot St. to Bayberry Ln.	204,000
High St.	Haverhill St. to house #128	834,000
		<u>\$1,038,000</u>
<u>FY2021</u>		
Dascomb Rd.	Andover St. to Clark Rd.	775,000
Woburn St.	Enfield Dr. to Rattlesnake Hill Rd.	1,024,000
		<u>\$1,799,000</u>
<u>FY2022</u>		
Abbot St.	Spring Grove Rd to Woburn St.	635,000
Lincoln St.	Cindy Ln. to Lowell St.	112,000
		<u>\$747,000</u>
<u>FY2023</u>		
Andover St.	Hall Ave. to Central St.	1,501,000
Greenwood Rd.	Lowell St. to Gleason St.	1,036,000
		<u>\$2,537,000</u>

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Cost Estimate & Timing:

The projected costs are estimated on a base figure of \$117/ft., which includes new bituminous concrete sidewalks, granite curbs, and trees. Additional items such as engineering, police, retaining walls, guardrail and drainage structures, where necessary at each location, are also included in the total costs.

Long-term:

The cost estimated to construct twenty-one (21) miles of new sidewalk is approximately \$12,973,000 which includes new bituminous concrete sidewalks, granite curbs, and trees. Additional items such as; engineering costs, police details or other necessary items such as retaining walls, guardrail, and drainage structures must be added to this total, where required.

Construction completed 1 year after approval with funds from General Fund borrowing.

Estimated Annual Cost or Savings of Operation and Maintenance:

N/A

Town Manager's Recommendation:

The Town Manager does not support funding this request.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,073,000	\$0
2020	\$1,038,000	\$0
2021	\$1,799,000	\$0
2022	\$747,000	\$0
2023	\$2,537,000	\$0

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Water & Sewer Vehicles**

DPW-12

Department Priority Ranking:
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$195,000
Dept. Request: \$195,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: Water Reserves

Dept.	Vehicle #	Year	Make/Model	FY19	FY20	FY21	FY22	FY23
Water	30	2005	Ford F150 4x4 Pickup w/Ext Cab (G F's)	\$35,000				
Water	31	2015	Ford F350 1 Ton F37 CABCA Pick w/Crane					
Sewer	32	2012	Ford F350 1 Ton F31 Dump PU Truck w/Plow				\$40,000	
Sewer	33	2012	Ford F350 1 Ton F31 Pickup w/Plow				\$40,000	
Water	34	2005	Mack 10-Wheel Dump Truck w / Snow Setup		\$175,000			
Water	35	2015	Ford F350					
Water	36	2016	Ford Transit 150					
Water	40	2007	John Deere 410J Backhoe			\$200,000		
Water	41	2016	Ford Escape AWD					
Water	42	2015	Ford F550 1 Ton 4x4 Dump & Plow					
Water	47	2005	Ford F150 4x4 Pickup w / Ext Cab					
Water	B	2013	Gorman Rup Pump (6")					
Water	C	2013	Gorman Rup Pump (6")					
Water		2007	Terex Light Tower/6FW Gen.. SNL GYF20083, Model RLA 060D1-4UH	\$15,000				
Water	70	2013	Infrastructure Maintenance Vehicle					\$250,000
Water	Trailer-6	2007	Big Tezx Utility Trailer 30SA8 - black	\$14,000				
Water	WS- 1	1997	Trailer Utility Sedan					
Water	WS- 2	2003	Haulmark K714BT Kodiak Enclosed Trailer	\$13,000				
Water	WS- 3	2000	Seca Utility Trailer for Water Jet Flusher	\$13,000				
Water	WS- 4	2001	Am Utility Trailer for Solar Powered Changeable Message Signs					
Water	WS- 5	2001	Am Utility Trailer for Solar Powered Changeable Message Signs					
Water	WS-A	2000	SRECO Utility Trailer co Sewer Main Cleaner		\$38,000			
Water	WS-B	2010	D210PHJD Compressor, weight 2700#					
Water	WS-C	2000	Vactron U-Dump Flat Trailer 512F					
			(No PM, Trailer services by Water Shop)					

WTP	2	2006	Ford Escape Hybrid AWD	\$35,000				
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PUBLIC WORKS

WTP	37	2009	Ford F150 1/2 Ton Pick X18		\$30,000			
Dept.	Vehicle #	Year	Make/Model	FY19	FY20	FY21	FY22	FY23
WTP	38	2013	Ford F250 1/2 Ton Pickup F18 4X4 139 Regular Cab Styleside					
WTP	43	2016	Ford Transit 350					
WTP	44	2015	Ford F150					
WTP	45	2016	Ford F250, Supercab					
WTP	48	2006	Ford Escape AWD	\$35,000				
WTP	49	2006	Ford Escape AWD	\$35,000				
WTP	50	2006	Ford F350 1 ton pickup w/ Crane			\$45,000		
WTP	46	2005	Ford F150 4x4 Pickup					
WTP	A-GEN	1977	Onan Generator (Unleaded)					
WTP	T1	2000	Trailer for Airman SDG45 Generator					
			Water/Water Treatment Total Request	\$195,000	\$243,000	\$245,000	\$80,000	\$250,000

Estimated Annual Cost or Savings of Operation and Maintenance:

N/A

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Requested/Proposed	TM Recommended/Plan
2019	\$195,000	\$195,000
2020	\$243,000	\$243,000
2021	\$245,000	\$245,000
2022	\$80,000	\$80,000
2023	\$250,000	\$250,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PUBLIC WORKS

PROJECT REQUEST: ***Filter Backwash Discharge Tank***

DPW-13

Department Priority Ranking: 3

(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19:

Dept. Request: FY21 Request

Submitted by: Chris Cronin, Director

Department: Municipal Services

Funding Source: Water Enterprise Borrowing

Project Description:

Design, engineering, permitting and construction management for a new Filter Backwash Discharge Storage/Equalization Tank to hold filter backwash water until it can be bled back into the treatment train at the raw water intake.

Project Justification and Purpose:

EPA did not renew the General Discharge Permit for the Water Treatment Plant and is expected to deny the permit and require an alternative method for the backwash water treatment and disposal. The National Pollutant Discharge Elimination System (NPDES) Potable Water Treatment Facility General Permit (PWTF GP) expired in 2009. Andover filed a Notice of Availability (NOA) to be covered under the new PWTF GP. Andover may not be covered under the PWTF GP because aluminum levels in the discharge might exceed the National Recommended Water Quality Criteria in Haggetts Pond. The EPA is working with USGS to determine mixing zones for WTF that discharge to ponds. A storage/equalization tank can be located on-site at the WTF to hold filter backwash water until it can be bled back into the treatment train at the raw water intake. The use of alum can be replaced with more complex forms of aluminum-based coagulants. These chemicals are more effective; however, they are typically more expensive than alum. The substitution might have adverse impacts on the water quality so the transition would need to be closely monitored. Discharging to lagoons is similar to the use of sedimentation basins. However, retention times are longer and water would generally flow directly to Haggetts Pond instead of the raw water intake of the WTF. Additionally, lagoons would have to be cleaned periodically using equipment such as a front end loader. Solids would have to be trucked off-site to a disposal facility. Space is also limited at the site, potentially making lagoons impossible to build. Other treatment options not listed here would likely be too expensive to be feasible.

Cost Estimate & Timing:

\$300,000 for engineering and approvals was approved at ATM 2012.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

Projected future department need for FY2021.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019		
2020		
2021	\$4,500,000	\$4,500,000
2022		
2023		

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PUBLIC WORKS

PROJECT REQUEST: ***Major Water Main Replacement/
Distribution Improvements Project***

DPW-14

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$3,000,000
Original Dept. Request: \$3,000,000
Submitted by: Christopher Cronin,
Director
Department: Municipal Services
Funding Source: Water Enterprise Borrowing

Project Description:

Replacement of cast iron water mains, water mains identified within the Distribution Study, and water mains identified to have historical issues. The project will also include the replacement, rehabilitation and abandonment of existing water mains (parallel Mains).

Cleaning and lining on section of unlined cast iron water mains that are of adequate size and replacement of appurtenances as identified by the Water Superintendent and Engineers.

Project Justification and Purpose:

A significant portion of the Towns Water distribution system consists of unlined cast iron water mains that have reduced hydraulic capacity (firefighting), and water quality issues due to mineral deposits. Water enterprise funding /borrowing would be used to replace, rehabilitate and abandon water mains. This will help to prevent catastrophic failures, improve capacity and water quality, prevent water loss within the system, and provide adequate fire protection.

In an effort to ensure a reliable and also a system with sufficient capacity within the water distribution system The Water distribution study and analysis has identified that areas of the Town Water infrastructure consists of deficient water mains. These main have reduced hydraulic capacity due to size, age, pipe material and historical structural issues. Town officials have identified areas throughout the Towns system that are in need of water main replacement for reasons such as but not limited to hydraulic capacity and historical structural issues. A number a locations within the system have parallel water mains, these mains are typically unlined cast iron mains which have limited capacity, and these locations require services and fire hydrants to be switched over to the new main prior to the abandonment of the older main.

The Towns Water Division conducts annual infrastructure improvements to properly maintain and upgrade The Towns aging water distribution system. This program helps to prevent catastrophic failures, improve capacity, prevent water loss, provide adequate fire protection and improve overall water quality.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$3,000,000	\$3,000,000
2020	\$3,000,000	\$3,000,000
2021	\$3,000,000	\$3,000,000
2022	\$3,000,000	\$3,000,000
2023	\$3,000,000	\$3,000,000

**TOWN OF ANDOVER
CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023**

PUBLIC WORKS

PROJECT REQUEST: ***WTP Parking Area Reconstruction***

DPW-16

Department Priority Ranking: 3
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY 19: \$0
Dept. Request: \$110,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: Water Enterprise Reserves

Project Description:

Reconstruction of rear parking areas at the Water Treatment Plant inclusive of pavement, curbing, and castings.

Project Justification and Purpose:

Due to various construction projects at the WTP over the years, the parking and access areas require reclamation, grading, casting adjustment, curbing adjustment, and repaving.

Project Estimates: Back and side lots/drives of WTP \$110,000

Cost Estimate:

Estimate was provided using recent project costs engineering data, means data, as well as current materials bid prices. Engineering and oversight of this project will be done in-house.

Estimated Annual Cost of Operation and Maintenance:

N/A

Timing and Financing:

Town Manager's Recommendation:

The Town Manager does not support funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$110,000	\$0
2020		
2021		
2022		
2022		

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Hydrant Replacement Program***

DPW-17

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$100,000
Original Dept. Request: \$100,000
Submitted by: Christopher Cronin,
Director
Department: Municipal Services
Funding Source: Water Enterprise Reserves

Project Description:

Continue with the installed hydrant inventory resulting in, but not limited to, the identification of hydrants needing replacement, repair and/or maintenance including replacement of identified hydrants.

Project Justification and Purpose:

Older fire hydrants within the Water Distribution system were identified during the comprehensive hydrant inventory and inspection. The continuation of the program will replace the remaining older fire hydrants to ensure reliability.

Cost Estimate & Timing:

It is estimated that approximately 20-30 hydrants will need major repair or replacement, at an estimated cost of \$2,000 - \$4,000 per unit depending upon the need.

Engineering and oversight of this project will be done in-house.
\$100,000 from water enterprise reserves

Estimated Annual Cost or Savings of Operation and Maintenance:

Annual maintenance cost associated with this program will be included in the budget

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$100,000	\$100,000
2020	\$100,000	\$100,000
2021	\$100,000	\$100,000
2022	\$100,000	\$100,000
2023	\$100,000	\$100,000

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Water Treatment GAC Replacement***

DPW-18

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY2019: \$
Original Dept. Request: FY20 Request
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: Water Enterprise Reserves

Project Description:

The water filtration system at the Water Treatment Plant consists of eight filter beds, each holding approximately 66,000 pounds of granular activated carbon (GAC). The FY20 funding replaces the GAC in four units, with the remaining four units being replaced for in FY21. This will allow for the recommended in-service life from the carbon while staying in compliance with the life-cycle requirements.

Project Justification and Purpose:

The granular activate carbon filtration system is operated and maintained in order to ensure a supply of drinking water of the highest quality. Timely replacement of the filter media is critical in maintenance requirements. Each replacement is expected to have a life span of four (4) years.

Cost Estimate & Timing:

The \$800,000 for FY 20-21 allows for a 14% increase over the 4 year life span of the GAC from FY2017. The \$912,000 for FY 24-25 allows a 14% increase also.

	FY 19	FY 20	FY 21	FY22	FY 23	FY 24	FY 25
FILTER #1		Sep-19				Sep-23	
FILTER #2		Sep-19				Sep-23	
FILTER #3		Apr-20				Apr-24	
FILTER #4		Apr-20				Apr-24	
FILTER #5			Sep-20				Sep-24
FILTER #6			Sep-20				Sep-24
FILTER #7			Apr-21				Apr-25
FILTER #8			Apr-21				Apr-25
GAC COST		\$400,000	\$400,000			\$456,000	\$456,000

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation:

The Town Manager supports funding this request for FY20 and FY21.

PUBLIC WORKS

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019		
2020	\$400,000	\$400,000
2021	\$400,000	\$400,000
2022		
2023		

PUBLIC WORKS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **WTP Electrical Substations Replacement**

DPW-21

Department Priority Ranking:
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$5,000,000
Original Dept. Request: \$5,000,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: Water Enterprise Borrowing

Project Description:

Replace electrical sub-station A at WTP, upgrade sub-station B to complete redundant feed, and install new 3-phase 4160 volt feed to sub B. Sub-station A is 1973 equipment and was not replaced in 1988 with WTP upgrades. Sub-station B was replaced in 1988.

Project Justification and Purpose:

Sub- station A is the main electrical feed for the WTP. At 40 years old, the availability of OEM parts replacement is an issue. It is also the only infrastructure at the WTP that is a single point of failure, with no redundancy. By also upgrading Sub B and installing a second feed from the utility, the consequence of failure in Sub A, would be eliminated. The 2011 Drinking Water Infrastructure Needs Survey and Assessment (DWINSA) recommends this project.

Cost Estimate & Timing:

\$500,000 was appropriated in FY18 for design, specs, and bid services. \$5,000,000 is being requested for full appropriation in FY19 for construction of sub-B of \$2,500,000 in FY19 and sub-A construction in FY 20.

Estimated Annual Cost or Savings of Operation and Maintenance:

Town Manager's Recommendation & Priority Ranking:

The Town Manager supports this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$5,000,000	\$5,000,000
2020		
2021		
2022		
2023		

TOWN OF ANDOVER

PUBLIC WORKS

CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Minor Sanitary Sewer Collection System Improvements* DPW-24

Department Priority Ranking: 2
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$50,000
Original Dept. Request: \$50,000
Submitted by: Christopher Cronin,
Director
Department: Municipal Services
Funding Source: Sewer Enterprise Reserves

Project Description:

Minor repairs to the sanitary sewer are necessary to ensure that the collection system is operating correctly. Repairs will include but not limited to Sewer manhole installation, replacement and repair. Minor defective pipe repair to eliminate I/I sources

Project Justification and Purpose:

With the aging of the Sanitary Sewer Collection System dating as far back as 1898, repairs are necessary to ensure the integrity of the collection system and to eliminate I/I sources

Cost Estimate & Timing:

\$50,000 from Sewer Enterprise reserves

Estimated Annual Cost or Savings of Operation and Maintenance:

Annual cost associated with this program will be included in the budget

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$50,000	\$50,000
2020	\$50,000	\$50,000
2021	\$50,000	\$50,000
2022	\$50,000	\$50,000
2023	\$50,000	\$50,000

TOWN OF ANDOVER

PUBLIC WORKS

CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **DALE STREET PUMPING STATION**

DPW-25

Department Priority Ranking: X
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$360,000
Original Dept. Request: \$360,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: Sewer Enterprise Borrowing

Project Description:

Replace Dale St. sewer pump station.

Project Justification and Purpose:

Existing pump station is constructed of steel and was installed in 1975. Both above and below grade portions of structure are starting to deteriorate.

Cost Estimate & Timing:

Fall 2018 engineering, specs, and bid. Spring 2019 construction.

Estimated Annual Cost or Savings of Operation and Maintenance:

Electrical cost of \$2400/ year preventive maintenance \$1200.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$360,000	\$360,000
2020		
2021		
2022		
2023		

TOWN OF ANDOVER

PUBLIC WORKS

CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Spring Grove Cemetery Maintenance*

DPW-28

Department Priority Ranking: 2
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$20,000
Original Dept. Request: \$20,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Revenue

Project Description:

	Priority	FY2019	FY2020	FY2021	FY2022	FY2019
General maintenance and Cemetery Improvements, including expansion of grave sites, software upgrades and roadway paving.	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Totals		\$20,000	\$20,000	\$20,000	\$20,000	\$20,000

Project Justification and Purpose:

General Maintenance – In addition to the expansion of grave sites, funds are used for cemetery maintenance such as grinding and screening of the loam pile, removal of hazard trees, repairs to the stone wall along Abbot Street, and for maintenance and upgrades to the cemetery GIS software.

Cemetery Improvements – Funds were appropriated in FY16 - FY18 and an inclusive plan for road repair, drainage work and other improvements at Spring Grove Cemetery are underway for work to be continued through Spring 2018. Expansion of the cemetery is currently being planned and these funds would continue ongoing work along with the expanded section.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$20,000	\$20,000
2020	\$20,000	\$20,000
2021	\$20,000	\$20,000
2022	\$20,000	\$20,000
2023	\$20,000	\$20,000

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PUBLIC WORKS

PROJECT REQUEST: *Inflow/Infiltration Removal Program*

DPW-30

Department Priority Ranking: X
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$100,000
Original Dept. Request: \$100,000
Submitted by: Christopher Cronin,
Director
Department: Municipal Services
Funding Source: Sewer Enterprise Reserves

Project Description:

Elimination of I/I sources within the sanitary sewer collection system.

Project Justification and Purpose:

Based on the outcome of the I/I investigation study, I/I sources will be identified and prioritized for elimination.

Cost Estimate & Timing:

\$100,000

Estimated Annual Cost or Savings of Operation and Maintenance:

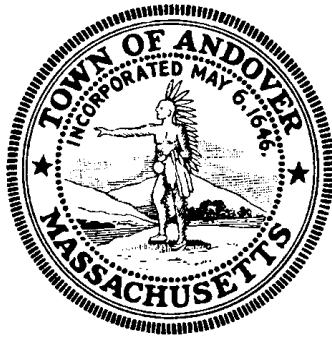
The quantity of I/I removed from the collection system will result in savings on pumping and treatment costs.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$100,000	\$100,000
2020	\$100,000	\$100,000
2021	\$100,000	\$100,000
2022	\$100,000	\$100,000
2023	\$100,000	\$100,000

PUBLIC FACILITIES



PUBLIC FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Town Projects - Building Division***

P&F-1

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$360,000
Dept. Request: \$360,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Revenue

Project Description:

	Priority	FY19	FY20	FY21	FY22	FY23
Project Overtime	1	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Town Offices Refurbishing	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Security System Upgrades	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Playground Equipment	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Door & Door Hardware Replacement	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
ADA Compliance	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Paving, Sidewalk, Curb repairs	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Misc. Building Roof Repairs	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Misc. Repairs-Town Yard Bldg.	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Totals		\$360,000	\$360,000	\$360,000	\$360,000	\$360,000

Project Justification and Purpose:

Project Overtime – Plant & Facilities trade staff overtime in support of Town/School capital projects.

Town Offices Refurbishing – Funds are requested for the ongoing program to replace carpeting, floor tile, signage, etc. in the Town Offices building.

Security System Upgrades – Funds are requested for the ongoing program to upgrade antiquated perimeter security systems and install access control and some CCTV cameras in Town buildings.

Playground Equipment – Funds are requested to repair aging playground equipment at Cuba Street, Lower Shawsheen & Penguin Park playgrounds. These funds will also be used to purchase safety surfacing material to replace areas as needed.

Door & Door Hardware Replacement – Funds are requested for the ongoing program to replace our aging interior and exterior doors and door hardware on Town buildings.

ADA Compliance – Funds are requested to support the Town Master Plan to address ADA accessibility requirements in all buildings.

Paving, Sidewalks, Curb Repairs – Funds are requested to repair aging driveways, sidewalks and catch basins at all Town buildings.

Miscellaneous Building Roof Repairs – Funds are requested to make minor repairs to miscellaneous Town buildings, such as the slate roofing at the Old Town Hall, the storage building at Balmoral and the

PUBLIC FACILITIES

buildings at Rec Park.

Miscellaneous Repairs to the Existing Town Yard Buildings – Funds are requested to make repairs to the existing buildings at the Town Yard. They have exceeded their life expectancy and repairs are necessary to maintain safe usage of these buildings.

Cost Estimate & Timing: \$360,000
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Estimated Annual Cost of Operation and Maintenance:
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Town Manager's Recommendation

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$360,000	\$360,000
2020	\$360,000	\$360,000
2021	\$360,000	\$360,000
2022	\$360,000	\$360,000
2023	\$360,000	\$360,000

PUBLIC FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Town Projects – Mechanical Electrical Division*

P&F-2

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$280,000
Original Dept. Request: \$280,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Source: General Fund Revenue

Project Description:

	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
Engineering	1	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Replace/Retrofit Fiberglass Street Light Poles and street lights	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Exterior Oil/Water/Sand Separators Cleaning	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Public Safety Center Shooting Range Lead Abatement	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
HVAC/Controls Upgrades	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Asbestos abatement and inspections	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Energy Conservation	2	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Smoke Detector and fire alarm rep	2	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Electrical upgrades	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Totals		\$280,000	\$280,000	\$280,000	\$280,000	\$280,000

Project Justification and Purpose:

Engineering – Funds are needed for professional engineering fees to implement capital projects.

Replace/Retrofit Fiberglass Street Light Poles – Funds are requested for the ongoing program to replace the Town owned fiberglass street light poles with metal units and replace damaged light poles on Main Street. Funds will also be used to begin retrofitting street lights to newer LED technology.

Exterior Oil/Water/Sand Separators Cleaning – Funds are requested to comply with EPA Regulations regarding the annual cleaning of oil/water/sand separators in all of our School and Town building parking areas.

PSC Shooting Range Lead Abatement – Shooting Ranges and portions of the range exhaust system accumulate lead contamination and must be abated annually. Funds are requested for this lead abatement.

HVAC/ Controls Upgrades – Much of the Town Offices and School Administration Buildings are served by outdated and inefficient HVAC distribution and control components. These obsolete components need to be replaced with modern digital controls phased over a period of five years.

Asbestos abatement and inspections – Funds are requested to address asbestos abatement and inspections as needed.

PUBLIC FACILITIES

Energy Conservation – These funds will be used to continue implementation of energy conservation initiatives in all Town buildings.

Smoke Detectors and Fire Alarms – Fire codes specify that smoke detectors be replaced or recalibrated every 10 (ten) years. This funding will replace out of date detectors in Town Buildings. In addition, as our fire alarm systems age they are requiring more repairs.

Electrical Upgrades – Funds are requested to make upgrades such as adding receptacles, data jacks and wireless access points.

Cost Estimate: \$280,000

Estimated Annual Cost of Operation and Maintenance:
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Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$280,000	\$280,000
2020	\$280,000	\$280,000
2021	\$280,000	\$280,000
2022	\$280,000	\$280,000
2023	\$280,000	\$280,000

PUBLIC FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***Town Vehicle Replacement***

P&F-4

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$51,000
Original Dept. Request: \$51,000

Submitted by: Chris Cronin, Director
Department: Municipal Services & Schools

Funding Source: General Fund Revenue

Dept./Div.	Year	Make/Model	FY2019	FY2020	FY2021	FY2022	FY2023
P&F Admin.-1-Security	2006	Ford Escape 4x4		\$24,000			
Build. Maint.-8	2006	Ford F250 3/4T Utility Body 4x4					
Build. Maint- Paint	2000	GMC Safari Cargo Van					
Build. Maint-10	2002	Ford Ranger Super Cab Pickup 4x4					
Build. Maint-4	2009	2009 Chevy Colorado 4wd Pickup (mileage 39580)	\$26,000				
Build. Maint-Rack	2017	Chevy C3500 1T Rack/Dump					
Build. Maint-6	2006	Chevy Express Van – Delivery Truck					
Build. Maint-12	2014	Ford F250 3/4T F2B Pickup 4x4				\$28,000	
Build. Maint-14	2015	Ford Tansit Connection Van 1/2T S7E1 121 LWB					
Elder Services- 1	2012	Ford Focus P3K-HB			\$18,000		
Elder Services- 2	2013	Ford Focus P3K-HB				\$18,000	
Elder Services- 3	2016	Ford Transit 250					
Elder Services- 4	2008	Ford E450 Econo Bus 1 1/2T BW		\$65,000			
Information Technology-1	2014	Ford Transit Connect Cargo S6EZ SWEB XL					\$26,000
Mech/Electrical-5	2011	Ford E250 3/4T Van (mileage 37248)	\$25,000				
Mech/Electrical-17	2010	Ford Transit Connect XL Cargo Van					\$26,000
Mech/Electrical-11	2010	Ford Transit Connect XL Cargo Van			\$25,000		
Mech/Electrical-9	2013	Ford Transit Connect Van 1/2T S6A					\$26,000
Mech/Electrical-13	2010	Ford Transit Connect XL Cargo Van					
Mech/Electrical-7	2015	Ford Tansit Connection Van 1/2T S7E1 121 LWB				\$25,000	
Mech/Electrical-15	2015	Ford F450 1 1/2T Chassis w/Fiberglass Utility Body & Dur-A-Lift					
Mech/Electrical-3	2006	Chevy Colorado CT1565 Supercab 4x4					
Vehicle Maint- 8	1996	Ford Ranger 4X4 Pickup - used for parts					
Vehicle Maint- 86	2000	Chevy K3500 1T Pickup 4x4					
Vehicle Main – 18	2002	Ford Ranger 4X4 Pickup					
Youth Services- 3	2012	Ford E450 1 1/2T Elkhart 15 Passenger Coach				\$50,000	
Youth Services- 1	2011	Ford E450 1 1/2T Elkhart 15 Passenger Coach			\$50,000		
Youth Services- 2	2010	Ford E450 1 1/2T Elkhart 15 Passenger Coach (mileage 49309)		\$50,000			
Youth Services- 4	2001	Ford Ecowag E350 1T Van					
Total			\$51,000	\$139,000	\$93,000	\$121,000	\$78,000

PUBLIC FACILITIES

Project Justification and Purpose:

Vehicle replacements have been pushed out year after year due to budget constraints. We can keep vehicles running mechanically, but metal rot is overtaking the vehicles' frames and bodies to the point that they will become unsafe to drive.

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$51,000	\$51,000
2020	\$139,000	\$139,000
2021	\$93,000	\$93,000
2022	\$121,000	\$121,000
2023	\$78,000	\$78,000

PUBLIC FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Major Town Projects*

P&F-6

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$775,000
Original Dept. Request: \$775,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Sources: General Fund Borrowing

Project Description:

	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
Memorial Hall Library – Install generator	1	\$220,000				
Memorial Hall Library – Stone wall repairs	1	\$125,000				
Memorial Hall Library – Restrooms	2		\$150,000	\$150,000		
Memorial Hall Library – Front entrance door replacement	2		\$25,000			
Memorial Hall Library replacement of wood retaining wall at receiving area	4				\$75,000	
Town Offices Renovations	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Town Offices and Center at Punchard – Sidewalk repairs	3			\$75,000		
West Fire Station Upgrades	1	\$250,000				
West Fire Station – Approach ramp apron reconstruction	1	\$25,000				
West Fire station replacement of concealed gutters	2		\$50,000			
West Fire station replacement of exterior wood window sills and trim	2		\$25,000			
Old Town Hall – Carpet replacement	4				\$30,000	
Old Town Hall replacement of historic wooden window sash	4				\$350,000	
Town office and Senior center Exterior façade repairs and cleaning	5					\$300,000
Town offices installation of aluminum storm windows	3		\$100,000			
Town offices replacement of main entrance exterior stairs	3			\$250,000		
Misc. repairs to bowling green stone building	1	\$50,000				

PUBLIC FACILITIES

Lower Shawsheen – Balmoral storage garage stone wall repairs	4				\$50,000	
Public Safety Center replacement of raised floor in dispatch area	2	\$25,000				
Public Safety police Dept. replacement of carpeting	1	\$30,000	\$30,000	\$30,000		
Public Safety Police Dept. replacement of evidence lockers	4				\$75,000	
Public Safety roof replacement	5					\$750,000
Public Safety Building pressure wash and waterproof exterior masonry	5					\$200,000
Totals		\$775,000	\$430,000	\$555,000	\$630,000	\$1,300,000

Project Justification and Purpose:

Memorial Hall Library – Install generator – Funds are requested to replace the old generator, which is inside the building, with a new diesel powered self-contained exterior unit. This will require a complete upgrade to the building's emergency electrical panels and system and the new generator will power the whole building in the event of an emergency.

Memorial Hall Library – Stone wall repairs – Funds are requested to make repairs to the stone retaining wall that runs along the Essex street side of the building along with the Pearson street side of the parking lot. Numerous stones have fallen out and the entire wall needs to be re-pointed. In addition the rear parking lot retaining wall capstones need repairs.

Memorial Hall Library Restrooms – Funds are requested to update the non-gendered restrooms on the first floor of the building. These are currently in poor condition and are extremely small. We will look into combining them into two larger rooms. Restrooms on the second floor will be planned for FY2021.

Memorial Hall Library front entrance door replacement – Funds are requested to replace the front entrance doors. The current doors are showing signs of rot and are becoming problematic.

Memorial Hall Library replacement of wood retaining wall – Funds are requested to replace the wood retaining wall at the rear receiving entrance with a masonry one. The current wood wall is falling apart due to rot.

Town Offices building renovations – Funds are requested to make upgrades to various office spaces in the Town Offices building. As staff are replaced, or new staff are hired, changes in the layout of the offices and wall modifications are required. There is a cost associated with this. The majority of this work is being outsourced to contractors, which is adding to the cost to complete.

Town Offices and Center at Punchard sidewalk repairs – Funds are requested to replace the concrete sidewalks around the building. The majority of them have cracked and heaved, causing tripping hazards.

West Fire Station upgrades – Funds are requested to upgrade the existing bathroom facilities. The bathrooms are original and do not allow for a mixed gender work force. Currently there is only one bathroom facility and it is utilized by both male and female personnel. The National Fire Protection Association Standards, as related to construction or renovation of fire stations, requires separate facilities for male and female personnel.

PUBLIC FACILITIES

West Fire Station approach ramp apron reconstruction – Funds are requested to reconstruct the approach apron in front of the overhead doors to the station. Over time, the weight of the trucks has settled the asphalt causing a dip in the pavement. Trucks have to maneuver this dip when entering and leaving the station.

West Fire Station replacement of concealed gutters – The copper gutters that are an integral part of the building soffit and fascia are leaking, allowing water to infiltrate the building. Funds are requested to replace them. Repairs were made recently as a short-term, temporary accommodation.

West Fire Station replacement of exterior wood windowsills and trim – Funds are requested to make repairs to the rotted windowsills and window trim at West Fire Station. The sills and trim are an integral part of the windows, and therefore the window must be completely disassembled in order to make repairs.

Old Town Hall carpet replacement – Funds are requested to replace the carpeting in both the senior drop-in center and the rear office space. The existing carpet has been in place for more than 20 years and is showing signs of excessive wear and staining. The carpet will be replaced with similar flooring that will hold up to the current uses of the spaces.

Old Town Hall replacement of historic wooden window sash – Funds are requested to make repairs or to replace the old, original windows at the Old Town Hall. For aesthetic reasons these historic wooden windows have no exterior weather protection and thus are exposed to the elements. This exposure to varying weather conditions results in deterioration over time.

Town Offices and Center at Punchard exterior façade repairs and cleaning – Funds are requested for repairing cracks, repointing and cleaning of the brick façade of the Town Offices complex building. Over the years numerous areas have started to deteriorate.

Town Offices building – Installation of aluminum storm windows – Funds are requested to install exterior aluminum storm windows. Storm windows that were installed on a sampling of the building's windows during the past few years have reduced draft infiltration significantly.

Town offices replacement of main entrance stairs – Funds are requested to replace the existing granite stairway. Several repairs have been made during the past five years to remedy damage caused by winter salt and freeze damage.

Repairs to the Stone House on Bowling Green – Funds are requested to repair the granite masonry walls and windows of the historic stone house located at Bowling Green. The walls have cracked and stones have come loose. The wood and protective screening on the windows have deteriorated due to rot.

Lower Shawsheen – Balmoral storage garage stone wall repairs – Funds are requested to make repairs to the stone wall surrounding the Balmoral storage garage. Stones have fallen out of the wall and the entire area needs repointing.

Public Safety Center Dispatch area floor replacement – The raised floor in the dispatch area has deteriorated and is becoming a safety hazard as the dispatchers' chairs are getting caught in holes and grooves as they move their chairs.

Public Safety Center carpeting replacement – Funds are requested to begin replacing the carpeting throughout the building. It is now 15 years old and has become quite worn.

PUBLIC FACILITIES

Public Safety Center replacement of Police Department evidence lockers – Funds are requested to replace the 15 year old evidence lockers with more modern and efficient sized lockers. These old lockers are too large to meet our current needs.

Public Safety Center roof replacement – Funds are requested to replace the current EPDM rubber roof with a PVC membrane roof. During the past few years the current roof has experienced frequent flashing and roof leaks. This roof has reached its end of life. The approximate cost to replace is \$35 per square foot.

Public Safety Center – Pressure wash and waterproof exterior masonry – Funds are requested to clean and waterproof the exterior masonry walls to prevent water penetration into the building.

Cost Estimate: \$775,000

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$775,000	\$775,000
2020	\$430,000	\$430,000
2021	\$555,000	\$555,000
2022	\$630,000	\$630,000
2023	\$1,300,000	\$1,300,000

PUBLIC FACILITIES

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Town & School Energy Initiatives*

P&F-7

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$565,000
Original Dept. Request: \$565,000
Submitted by: Chris Cronin, Director
Department: Municipal Services
Funding Sources: General Fund Borrowing

Project Description:

Town	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
Memorial Hall Library – Retrofit AHU-2 from constant volume to VAV	1	\$65,000				
Memorial Hall Library - Retrofit 1 st floor lighting to LED	3		\$100,000			
Old Town Hall - HVAC upgrades	3				\$150,000	
Old Town Hall - LED lighting upgrades	5					\$100,000
Red Spring Road - Install EMS	3			\$50,000		
Town Offices Complex – Retrofit hallway and office lighting to LED	4			\$100,000	\$100,000	
West Fire Station – Retrofit all lighting to LED	1	\$60,000				
West Fire Station - Design, then install central HVAC system.	1	\$12,000	\$120,000			
Youth Center - Heat conversion	5					\$50,000
Total Town		\$137,000	\$220,000	\$150,000	\$250,000	\$150,000

Schools	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
All Schools – VFD Pumps & Fans	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
All Schools – Insulate domestic hot water pipes	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
School Main Offices Islanding-South School, then Sanborn	1	\$60,000		\$50,000		
Collins Center – Design for New Heating System	2		\$80,000			
Collins Center – Install New Heating System	2			\$500,000		
Doherty Middle School – Retrofit 2nd flr classroom lighting to LED.	1	\$150,000	\$150,000			
Doherty Middle School – Upgrade Gym fan with VFD fan and add CO2 sensing	2		\$300,000			
Doherty Middle School - Retrofit 1st flr classroom lighting to LED	4				\$150,000	\$150,000
Doherty Middle School – Pneumatic Controls to DDC	4					\$50,000
Doherty Middle School – Install New Condensing Boilers	4				\$100,000	\$100,000

PUBLIC FACILITIES

Sanborn School – Install VFD’s to exhaust fans and program into EMS.	3			\$50,000		
Sanborn School – Design to Convert Steam Heat to Hot Water DDC	4					\$80,000
Sanborn School - Retrofit classroom lighting to LED	3					\$100,000
South School – Phase 2 of Demand Control Project: DCV Exhaust Fans	1	\$80,000				
South School – Install hot water pumps and VFD’s.	1	\$88,000				
South School – Retrofit lighting in classrooms to LED	3				\$100,000	
South School – Pneumatic Controls to DDC	4					\$75,000
Total Schools		\$428,000	\$580,000	\$650,000	\$400,000	\$605,000

Total Combined		\$565,000	\$800,000	\$800,000	\$650,000	\$755,000
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Project Justification and Purpose:

Town:

Memorial Hall Library – Retrofit AHU-2 from constant volume to VAV – Funds requested will convert a constant volume heating and cooling into a variable volume air system, where each zone will be controlled separately. This will add to the comfort of the spaces, allowing them to be controlled individually based on need, and will save energy. We expect a utility incentive of \$6,000 and a savings of \$3,500 in annual heating and cooling costs.

Memorial Hall Library – Retrofit 1st floor lighting to LED – Funds requested will retrofit the old technology parabolic lighting to LED fixtures, which are energy efficient and provide more even coverage. The fluorescent fixtures in this area provide dim and uneven light. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling, due to the mercury used in their manufacturing. We expect a utility incentive of \$10,000 and an annual electricity and maintenance savings of \$5,000.

Old Town Hall HVAC upgrades – Funds are requested to make upgrades and modifications to the current HVAC systems in the building. The existing air conditioning system runs to cool the entire building, when only a single area is occupied, resulting in a waste of energy. Funding will allow us to segregate the areas into separate systems.

Old Town Hall – LED lighting upgrades – Funds are requested to replace the existing light fixtures with new LED type fixtures with controls. Some fixtures are period fixtures and an LED equivalent will need to be acquired.

Red Spring Road – Install EMS – Funds are requested to install an energy management system (EMS) at the Red Spring Road maintenance building. This building is not currently connected to the town-wide EMS.

Town Offices Complex – Retrofit hallway and office lighting to LED - Funds requested will retrofit the complex to more efficient LED fixtures. Lighting in some areas is dim and uneven fluorescent lighting. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling due to the mercury used in their manufacturing. We expect a utility incentive

PUBLIC FACILITIES

of \$20,000 and an annual electricity and maintenance savings of \$10,000.

West Fire Station – Retrofit all lighting to LED – Funds requested will retrofit all lighting to new LED fixtures with controls. The existing lighting is very old, inefficient, and in many cases, broken altogether. The project will add occupancy controls to this 24/7 facility so that lighting can be automated. We expect a utility incentive of \$5,000 and an annual electricity savings of \$1,500.

West Fire Station HVAC and EMS upgrades – Funds are requested to replace the window air conditioners with a whole building HVAC strategy including an energy management system. The station currently has some split units with minimal ventilation. Conditioned and ventilated air is important for this busy facility, especially since its staff are subjected to extreme heat during their emergency calls. Funds are requested over two years; for design, then implementation.

Youth Center – Heat conversion – Funds are requested to upgrade portions of the heating system to more energy efficient systems. When the building was constructed, funds were in adequate and some electric units were installed.

Schools:

All Schools – System Wide VFD Pumps and Fans retrofits (in-house installation) – Funds are requested to continue a system wide program to retrofit existing one-speed drives to variable speed drives. In-house labor will be utilized for this energy saving measure. Utility incentives often cover 50% or more of the cost of each VFD, and paybacks run under 5 years (many under 3 years). The lifecycle of each drive is approximately 15 years. We can estimate that if we spend \$100,000 on pumps, and paybacks on these types of projects range between 4 and 5 years, then our annual savings may be more than **\$20,000 per year**.

All Schools – System Wide Insulation of Domestic Hot Water Piping – Funds are requested to continue a system wide program to insulate piping. Heat loss can be significant as heated water is delivered to unit heaters and hot water is delivered for domestic uses. Utility incentives for pipe insulation often cover 50% of the cost of the insulation, with payback estimated at less than 3 years, according to Columbia Gas. We can estimate that if we spend \$25,000 on pipe insulation, and paybacks on these types of projects are approximately 3 years, then our annual savings may be more than **\$8,000 per year**.

School Main Offices Islanding – South Elementary School and Sanborn Elementary School – Main Offices at schools require heat during vacations when the rest of the building may be unoccupied and the boilers run for the entire building even though only the office is being used. Similarly, the Main Offices are occupied much later each day than are the classrooms in some schools. We want to “island”, or separate, the Main Offices heating and cooling from the rest of the buildings, where feasible, to save energy. The systems at South and Sanborn are already nearing the end of their useful life. This should result in savings of **\$6,000-8,000 per year combined**.

Collins Center – Design for New Heating System – Funds are requested to design a new heating system for the Collins Center peripheral rooms, which are currently operating with electric baseboard heat. Efficiencies at AHS may now allow for the expansion of the heating system to encompass those areas. Design will include bid documents.

Collins Center – Installation of New Heating System – Funds are requested for the installation, as per design, to convert the peripheral areas of the Collins Center from electric heat to natural gas and connect to the current building system.

Doherty Middle School – Funds requested will retrofit the 2nd floor classrooms to more efficient LED fixtures with controls. Lighting is now dim and uneven fluorescent lighting. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling due to the mercury used in their manufacturing. The new lights will also be fit with occupancy sensing so that lights will shut off when areas are unoccupied. The cost also includes repair of the broken slat ceilings in some classrooms, replacing them with new suspended ceilings. We expect a utility incentive of \$30,000 and annual electricity and maintenance savings of \$15,000.

Doherty Middle School – Upgrade Gym fan with VFD fan and add CO2 sensing – Funds are requested

PUBLIC FACILITIES

to replace a 40 year old fan with a more powerful and variable speed fan, which will be linked to the energy management system and will use the CO2 sensor to maintain sufficient ventilation. Gyms are used intermittently and there is energy savings when sensors are added to detect occupancy and air quality.

Doherty Middle School – Retrofit 1st floor classroom lighting to LED - Funds requested will retrofit the first floor classrooms to more efficient LED fixtures with controls. Lighting is now dim and uneven fluorescent lighting. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling due to the mercury used in their manufacturing. The new lights will also be fit with occupancy sensing so that lights will shut off when areas are unoccupied. The cost also includes repair of the broken slat ceilings in some classrooms, replacing them with new suspended ceilings. We expect a utility incentive of \$30,000 and an annual electricity and maintenance savings of \$15,000.

Doherty Middle School – Pneumatic Controls to Direct Digital Controls – Funds are requested to eliminate the use of the pneumatic compressed air powered control mechanisms at Doherty Middle School, by replacing them with digital electronic controls. The pneumatic systems rely on miles of air lines throughout DMS, which leak and require the constant use of a compressor during the heating season. The electronic Direct Digital Control (DDC) system affords better control and accuracy and eliminates the maintenance of the pneumatic lines.

Doherty Middle School – Install New Condensing Boilers – Funds are requested to replace aged boilers with new condensing energy efficient units, over 2 fiscal years. We expect a utility incentive of \$15,000 and annual natural gas savings of \$8,500.

Sanborn School – Install VFD's to exhaust fans and program into EMS – Funds are requested to retrofit and/or replace exhaust fans so their speed can vary to properly ventilate classrooms and spaces. Constant systems can draw in cold air. New variable systems keep pressure constant and will link to the energy management system.

Sanborn School – Design Hot Water DDC Heating System – Funds are requested to design the conversion of the current steam boiler system to a new, high efficiency condensing hot water boiler heating system with Direct Digital Controls (DDC). The system may need to be expanded, or expandable, based on future plans for Sanborn School. Design work includes preparation of a *Request for Proposals* for bidding.

Sanborn School – Retrofit classroom lighting to LED - Funds requested will retrofit the classrooms to more efficient LED fixtures with controls. Lighting is now dim and uneven fluorescent lighting. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling due to the mercury used in their manufacturing. The new lights will also be fit with occupancy sensing so that lights will shut off when areas are unoccupied.

South School – Phase 2 of Demand Control Ventilation project – South School has been undergoing an HVAC modernization project over the past few years, including new boilers and Phase 1 of ventilation and exhaust fan retrofits to variable speed with CO2 sensing. Phase 2 completes the exhaust fan portion of the larger project. We expect utility incentives of \$21,000 and annual cost savings of \$6,000.

South School – Install hot water pumps and VFD's – Funds requested will complete the modernization of the heating plant at South School. This project was requested through a Green Community Grant but was not funded. It is integral to optimizing the new boiler system. We expect utility incentives of \$10,000 and an annual savings of \$6,000.

South School – Retrofit lighting in classrooms to LED - Funds requested will retrofit the classrooms to more efficient LED fixtures with controls. Lighting is now dim and uneven fluorescent lighting. Fluorescent tube lights are being phased out due to their harsh pulse light and because they require hazardous materials recycling due to the mercury used in their manufacturing. The new lights will also be fit with occupancy sensing so that lights will shut off when areas are unoccupied.

South School – Pneumatic Controls to Direct Digital Controls – Funds are requested to eliminate the use of pneumatic compressed air powered control mechanisms at South School with digital electronic controls. Pneumatic systems rely on miles of air lines throughout South, which leak and require the constant use of a compressor during the heating season. The electronic Direct Digital Control (DDC) system affords

PUBLIC FACILITIES

better control and accuracy, and eliminates the maintenance of the pneumatic lines.

NOTE: Andover Energy Division may apply for grants and/or incentives to fund the cost, or reduce the cost, of some of the projects identified above.

Cost Estimate: \$565,000

Estimated Potential Cost Savings for FY2019: \$68,000

Estimated Annual Cost of Operation and Maintenance: Reduction in O&M cost

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$565,000	\$565,000
2020	\$800,000	\$800,000
2021	\$800,000	\$800,000
2022	\$650,000	\$650,000
2023	\$755,000	\$755,000

PUBLIC FACILITIES
TOWN OF ANDOVER
CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Town Playground Replacements*

P&F-8

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$200,000
Original Dept. Request: \$200,000
Submitted by: Edwin Ataide
Department: Plant & Facilities
Funding Sources: General Fund Revenue

Project Description:

This is the 2nd year of a 5 year replacement project of all Town playgrounds which addresses:

- Design of all playgrounds
- Replacement of all playground equipment and surfacing
- Replacement of the baseball fields and basketball courts
- ADA compliance, parking and safety

	Priority	FY19	FY20	FY21	FY22	FY23
Lower Shawsheen Playground	1	\$200,000				
Indian Ridge Playground	2		\$400,000			
Ballardvale Playground Phase 2	3			\$250,000		
West Andover Playground	4				\$200,000	
Totals		\$200,000	\$400,000	\$250,000	\$200,000	

Project Justification and Purpose:

Lower Shawsheen Playground - The Lower Shawsheen Playground and park are in need of updating to comply with safety standards and the ADA. The play structures are old and showing signs of wear. The layout of the park requires improvements for accessibility. Funds are requested in FY19 to bring the equipment and layout of the park into compliance.

Indian Ridge Playground – This playground, located on Cuba Street, is very old and little has been done to update the play structures and the park as a whole. Funds will be requested in FY20 to update the equipment and improve the park layout to bring both into compliance with safety standards and the ADA.

Ballardvale Playground – Funds were approved at the 2012 and 2014 Town Meetings to design and begin construction of the Ballardvale Playground as a two-phase project. The first phase was for the design and replacement of all playground equipment and walkways and was completed in 2015. In addition to the funds that were appropriated in 2012, the neighborhood raised \$30,000 to purchase and construct the gazebo. The second phase will address the ballfield and basketball court, as well as the fencing and perimeter walking path.

West Andover Playground – Plant & Facilities would like to look at the possibility of building a playground in the West Andover area of town. Currently there is not a public playground that families can walk to in that area.

PUBLIC FACILITIES

Cost Estimate: \$200,000

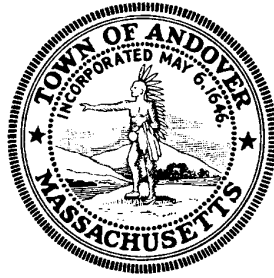
Estimated Annual Cost of Operation and Maintenance:
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Town Manager's Recommendation:

The Town Manager supports funding this request for FY19 – FY23.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$200,000	\$200,000
2020	\$400,000	\$400,000
2021	\$250,000	\$250,000
2022	\$200,000	\$200,000

ANDOVER PUBLIC SCHOOLS



ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *School Projects – All Schools*

SCH-1

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: **
Original Dept. Request: \$585,000
Submitted by: Sheldon H. Berman, Ed.D./
Chris Cronin, Director
Department: School and
Municipal Services
Funding Source: General Fund Revenue

Project Description:

	Priority	FY19	FY20	FY21	FY22	FY23
ADA Compliance (Handicap Accessibility)	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Energy Conservation	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Engineering	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Asbestos Survey and Remediation	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Carpet and Flooring Replacement	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Electrical Upgrades for New Technology	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Door (Interior and Exterior) Hardware and Installation	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Fence and Guardrail repairs	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Sidewalk Repairs and Replacements	1	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
504 & IEP Compliance (Individual Educational Plan)	1	\$45,000	\$45,000	\$45,000	\$45,000	\$45,000
HVAC/Energy Management Upgrades	1	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
Painting and Parking Lot Striping	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Plumbing Upgrades	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Refinish Gym and Stage Floors	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Bathroom Partitions	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Shade Replacements	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Smoke Detector and Fire Alarm repairs	1	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
School Playgrounds	1	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
Security Upgrades	1	\$75,000	\$75,000	\$75,000	\$75,000	\$75,000
Totals		\$585,000	\$585,000	\$585,000	\$585,000	\$585,000

ADA Compliance – Funds are requested to support the Town Master Plan to address handicap accessibility requirements in all school buildings.

Energy Conservation – Funds are requested to implement further energy conservation measures in all school buildings.

Engineering – Funds are requested for professional engineering fees to implement capital projects.

Asbestos Survey and Remediation – Funds are requested to continue compliance with the AHERA law and asbestos removal.

Carpet and Flooring Replacement – Funds are requested to replace carpeting and flooring in all school buildings, as it relates to addressing health and safety issues, as problems arise.

Electrical Upgrades for New Technology – Funds are requested to provide additional electrical outlets and power to service additional needs, driven by new technology in our schools. For example, some of our older schools still have classrooms with only one electrical outlet.

Door & Door Hardware Replacement – Funds are requested to continue the ongoing program of replacing aging interior and exterior doors, and door hardware, on all school buildings. Some existing door frames have rot and will become a security issue if this is not corrected.

Fence and Guardrail Repairs – Fences and guardrails on school sites frequently sustain damage during the year. Funds are requested for repair or replacement as necessary, and to install new fences when the need arises.

Sidewalk Repairs and Replacements – Funds are requested to repair and/or replace sidewalks on school sites when necessary due to deterioration, heaving and other types of winter damage.

504 & IEP Compliance (Individual Educational Plan) – (Mandated IEP Building Modifications) – Funds are requested to provide building modifications on an as-needed basis when a staff member, or a student's IEP plan, requires upgrades or modifications to the classrooms or offices to accommodate for hearing impairment or sight issues. These mandates come up without advance notice and require immediate attention.

HVAC/Energy Management Upgrades – Funds are requested to upgrade heating, ventilating and air conditioning equipment, and control system components.

Painting and Parking Lot Striping – Funds are requested to repaint faded parking lot striping and major exterior building painting.

Plumbing Upgrades – Funds are requested to replace aged and obsolete plumbing fixtures and systems with new water saving units.

Refinishing Gymnasium and Stage Floors - Funds are requested to screen and refinish approximately 65,000 square feet of gymnasium and stage floors. If this is not done on an annual basis, more extensive sanding and refinishing will be necessary, at a substantially higher cost.

Bathroom Partitions – Funds are requested to replace rotted metal bathroom partitions with new phenolic partitions as part of an ongoing program.

Shade Replacements – Funds are requested to replace shades and blinds in all schools on an *as needed* basis. Many of the blinds and shades in the buildings are old and have dried out. We have been replacing them with a newer, clutch roller type shade, which is much more durable and safer to use.

Smoke Detector and Fire Alarm repairs – Smoke detectors are required to be replaced every ten years. Funds are requested to replace smoke detectors in a number of schools that are coming due in the next few years. In addition, as our fire alarm panels age they are requiring more repairs.

School Playgrounds – Funds are requested to begin replacing aged playground structures in various schools. Many of the older playground structures will need to be removed during the next five years due to safety issues caused by deterioration. Funds will also be used to add to the wood carpet mulch play surfacing as it needs to be enhanced each year.

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Security Upgrades- Funds are requested to add access control and CCTV cameras in all school buildings as part of an ongoing program. As the existing systems are expanded, funds need to be increased to cover maintenance.

Cost Estimate: \$585,000

Town Manager's Recommendation:

** The Town Manager supports a total of \$1,040,000 of General Fund Revenue allocated between SCH-1 and SCH-2 for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$585,000	**
2020	\$585,000	
2021	\$585,000	
2022	\$585,000	
2023	\$585,000	

ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: ***School – Projects by Building***

SCH-2

Department Priority Ranking: 1

(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$ **

Original Dept. Request: \$455,000

Submitted by: Sheldon H. Berman, Ed. D./

School Committee

***Asterisk/gray highlighted cells identify requests that differ from P & F recommendation**

Department: School and P&F

Funding Source: General Fund Revenue

Revised by Chairs 10/26/17

Project Description:

	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
* AHS Painting	1	\$20,000	\$35,000	\$35,000	\$35,000	\$15,000
AHS Room 272 cut doorway to hall	1	\$15,000				
* AHS Window glass seal repairs	1	\$30,000	\$25,000	\$35,000	\$40,000	\$45,000
* AHS Collins Center Instrument Cabinets	1		\$33,800			
* AHS Carpet/flooring replacement	1	\$20,000	\$20,000	\$30,000	\$40,000	\$40,000
* AHS fence repairs at Lovely Field	1		\$26,000			
AHS HVAC Study	2		\$30,000			
* DMS Replacement of all Hallway cabinet heater covers	1				\$72,800	
* DMS Repaint all Classrooms	1	\$30,000	\$35,000	\$35,000	\$35,000	\$40,000
* DMS flooring and stair tread Replacement	1	\$20,000	\$20,000	\$30,000	\$40,000	\$40,000
DMS continue with acoustical sound deadening panels in gymnasium	1	\$15,000				
* DMS Remove large sinks and cabinets room 119	1			\$21,600		
DMS Exterior Windows	1	\$35,000	\$35,000	\$35,000	\$35,000	\$35,000
Shawsheen Window Replacement	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Shawsheen Hallway/classroom Painting	1	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Sanborn repair and paint wood wall in Gym near windows	1	\$10,000				
* South Elementary School Air-Lock Doors	1			\$48,600		
* South Elem. Stage Flood Lights	1					\$16,800
South painting of underside of all exterior soffits and steel supports	1	\$25,000				
South painting of all exterior doors and frames	1	\$30,000				
WMS repairs to library windows	1	\$30,000				
* WMS Repair or replace wood panels in gymnasium	1					\$51,300

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West Elementary Renovations	1	\$40,000	\$40,000	\$40,000	\$40,000	\$40,000
West Elem. Restroom Partitions	1	\$15,000	\$15,000	\$15,000		
West Elementary resurface tile floor in restrooms across from room C6	1	\$15,000				
West Elementary replace sinks and cabinets in A&B pods	1	\$25,000				
West Elementary repairs to side entrance patio	1	\$15,000				
* West Elementary Crawlspace	2			\$31,200		
* Wood Hill/High Plain Remove old oil tank concrete pad for parking	1		\$46,800			
* Wood Hill/High Plain Tile	1			\$37,800		
* Wood Hill/High Plain Classroom painting	1	\$25,000	\$25,000	\$30,000	\$30,000	\$40,000
Totals		\$455,000	\$426,600	\$464,200	\$407,800	\$403,100

* Please note that most CIP FY2018 requests for projects were cut to purchase books. These cut projects are being carried over with the addition of this year's requests

Project Justification and Purpose:

Andover High School Painting – Funds are requested to paint all of the classrooms, offices and hallways throughout the building. Some of these areas have not been painted since the 1995 renovation project. A six-year phased plan began in FY2017 and requested funds are for the third year of this six-year plan.

Andover High School Cut Doorway – Funds are requested to cut a doorway into a masonry wall in order to allow for access to a room that can currently be entered only by crossing through an adjacent classroom.

Andover High School window glass replacement – Funds are requested to replace double pane glass panels in multiple rooms throughout the building. The seals on the windows to be replaced have failed.

Andover High School Collins Center Instrument Cabinets – Funds are requested to purchase and install new Wenger instrument cabinets to house band and orchestra instruments. The current cabinetry is outdated, provides limited safety for the instruments and offers insufficient storage, resulting in a space that is cluttered and has, at times, been in violation of fire code. The Wenger cabinetry is made specifically for musical instruments and will allow for each student to lock his or her instrument, reducing the likelihood of theft, such as was experienced two years ago. This cabinetry is an efficient way to store and secure the equipment, leaving the performing arts classrooms more open for use by rental groups. This was requested, but cut from CIP FY2018.

Andover High School Carpet/Flooring replacement – Funds are requested to replace carpeting and other flooring within the school. There are areas where the carpeting has deteriorated, causing trip hazards. Some of these concerns are in high traffic areas. The current carpeting is 22 years old.

Andover High School fence repairs at Lovely Field – Funds are requested to make repairs to sections of the fencing around the field that have been damaged by weather, are rusting, and are becoming a safety concern.

Andover High School HVAC Study – Funds are requested to study the feasibility of expanding the existing air conditioning system into the classrooms. Classrooms without windows will be of priority. Funds were requested, but cut from CIP FY2017.

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Doherty Middle School - Replacement of all hallway cabinet heater covers – Funds are requested to replace the steel covers on all hallway convection heaters. They are original to the building and have become rusted and damaged over time.

Doherty Middle School - Repaint all Classrooms – Funds are requested to repaint all classrooms. The classrooms are showing their age, with peeling paint and plaster. Some areas have water stains from previous leaks, which occurred before the roof was replaced. This is a multi-year plan.

Doherty Middle School flooring and stair tread replacement – Funds are requested to replace flooring and stair treads throughout the building. Some carpeting has deteriorated and stair treads have cracked and broken, causing tripping hazards.

Doherty Middle School – Acoustical panels in the gymnasium – Funds are requested to install acoustical foam sound deadening panels in the gym. Panels have been installed on all open walls, and the old tectum panels, which have deteriorated, should also be replaced with these acoustical panels.

Doherty Middle School removal of sinks and cabinets – Funds are requested to remove the old science work stations, which are currently projecting into the center of the room, to allow for the room to be used as a typical classroom.

Doherty Middle School exterior windows – Funds are requested to repair or replace the exterior windows in the glass atriums. The seals in the glass have been failing more each year, obscuring visibility.

Shawsheen Elementary School window replacement – Funds are requested to replace the windows. These funds have been requested, but cut from CIP FY2014, CIP FY2015, CIP FY2016, CIP2017 and CIP2018. Some of the aluminum windows have worn tracks, which allow the sash to fall inward, on top of the person opening the window. There are currently wooden pieces in place to prevent this from occurring.

Shawsheen Elementary School hallway and classroom painting – Funds are requested to repaint the *hallways and classrooms throughout the school building. The paint is old and is peeling in various places.* The painting will be done in phases, over multiple years.

Sanborn gymnasium wood wall – Funds are requested to repair and repaint the time worn wood walls in the gymnasium.

South Elementary School air-lock doors – Funds are requested to install air-lock doors at the entrance near the rear gymnasium hallway. These funds were requested, but cut from CIP FY2014, CIP FY2015, CIP FY2016, CIP FY2017 and CIP FY2018. This is the only access door to the outside of the building from the rear foyer that does not have an inner door to break the cold from entering the building.

South Elementary Stage Flood Lights – Funds are requested to replace the existing lighting fixtures and bulbs with newer, more efficient, LED technology. The existing fixtures burn through bulbs often, requiring frequent replacement. LED technology has a longer life span and is therefore more cost effective. Funds were requested, but cut from CIP FY2017 and CIP FY2018.

South Elementary School soffit and steel painting – Funds are requested to scrape and paint all exterior soffits and steel framing that has peeled and is rusting.

South Elementary School painting of all exterior doors and frames – Funds are requested to scrape and paint all exterior doors and frames that have peeled and are rusting.

West Elementary School renovations – Funds are requested to renovate the clinic and faculty restrooms. These funds were requested, but cut from CIP FY2014, CIP FY2015, CIP FY2016, CIP FY2017 and CIP FY2018. These restrooms have not been updated since they were originally installed and they are

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showing their age with missing tile, cracks and worn out fixtures.

West Elementary School restroom partitions – Funds are requested to replace the partitions in the Grade 5 restrooms. These partitions have become warped and stained, and the hardware no longer opens properly. This was requested, but cut from CIP FY2018.

West Elementary School tile floor resurfacing – Funds are requested to resurface the ceramic tile floors in the two restrooms across from room C-6. Over the years broken tiles have been patched with non-matching color tile, causing an unappealing patchwork floor.

West Elementary School sinks and cabinets replacement – Funds are requested to replace the sinks and cabinets in A and B pods. They are original and have worn out and deteriorated.

West Elementary School repairs to the side entrance patio – Funds are requested to make repairs to the brick walls and concrete deck of the side patio near door #7.

West Elementary School crawlspace – Funds are requested to create an outside access to the crawlspace in B-Pod. Currently the only way to access the area beneath B-Pod is by crawling over and under pipes. This poses a problem for maintenance staff when they need to bring filters or replacement equipment into the space.

West Middle Library Window repairs – Funds are requested to replace glass panels that have lost its seal and repair the exterior wood mullion frames.

West Middle Gymnasium Wood Panel repairs – Funds are requested to replace and or repair the wood paneling in the gymnasium. It is original with the building and has begun to splinter and crack causing safety issues.

Wood Hill / High Plain concrete pad removal – Funds are requested to remove the raised concrete pad and fencing that housed the former oil tank, which has been removed, and pave the area to create more parking for the loading dock area.

Wood Hill / High Plain installation of VCT floor tile – Funds are requested to finish replacing the carpet in the main offices of both schools with VCT floor tile. In FY2014 the main areas of the offices were replaced. Funding will allow for this VCT floor tile project to be completed. Funds were requested, but cut from CIP FY2017 and CIP FY2018.

Wood High/High Plain Painting – Funds are requested to paint all of the classrooms, offices and hallways throughout the building. Some of these areas have not been painted since the building was constructed.

Cost Estimate: \$650,000

Fiscal Year	Department Request/Proposed	TM Recommended/Plan
2019	\$455,000	
2020	\$426,600	
2021	\$464,200	
2022	\$407,800	
2023	\$403,100	

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019-2023

PROJECT REQUEST: *Textbooks*

SCH-3

Department Priority Ranking:
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: \$626,000
Submitted by: Sheldon Berman, EdD
 Nancy A. Duclos, PhD
Department: School, Textbook Adoption
Funding Source: General Fund Revenue

Project Description: Textbooks

The Andover Public School District, utilizing a blended environment where text and technology are both necessary and appropriate is committed to maintaining the most current programmatic materials that align to the Massachusetts State Frameworks. The re-establishment of the program review cycle (PRC) process will aid in identifying what materials (electronic and/or paper) need to be purchased and the extent to which this blended environment is most beneficial to student learning.

	Priority	FY19	FY20	FY21	FY22	FY 23
Gr. 6-12 World Language PRC FY19			\$ -	\$ 400,000.00		
ESL		\$5,000.00	\$5,000.00	\$5,000.00		
PK-5 Literacy PRC FY 18	1	\$ 450,000.00	\$ 450,000.00	\$ -		
Gr. 6-12 English Language Arts PRC FY18		\$ -	\$ -	\$ -		
PK-8 Math – PRC FY 14; FY 20		\$ -		\$ -	\$ 500,000.00	
Gr. 9 -12 Math PRC High School FY 17		\$ -	\$ -	\$ -		
PK-5 Science PRC FY 15			\$ -	\$ -		\$ 500,000.00
Gr. 6-12 Science PRC Middle School FY 17	1	\$ 25,000.00	\$ -			
PK-5 Social Studies PRC FY 17	1	\$ 36,000.00	\$ 40,000.00	\$ 100,000.00		
Gr. 6-12 Social Studies PRC FY 17	1	\$ 50,000.00	\$ -	\$ -		
PK – 12 Fine Arts		\$5,000.00	\$5,000.00	\$-		
PE/Health		\$5,000.00	\$5,000.00			
PK-12 Response to Intervention		\$50,000.00	\$80,000.00	\$80,000.00	\$80,000.00	\$80,000.00
Totals		\$626,000.00	\$585,000.00	\$585,000.00	\$580,000.00	\$580,000.00

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Project Justification and Purpose:

Andover Public Schools remains committed to ensure that all instructional programs align to standards, reflect currency, and provide our students with an engaging educational experience. The seven-year curriculum and program review cycle begins with a two-year evaluation of product, process, and pedagogy. Based on these results, recommendations are made for a change of program, to upgrade the current program, or to make no change at all. The next two years of the cycle represents an implementation phase, where teachers and administration are full committed to deliver the recommended program with fidelity. The last three years in the cycle are spent making adjustments to fill in gaps or overlaps that may occur. Then the cycle begins anew. Most textbooks and programs go through significant changes within that 7-year period. A program review has been completed in the areas of K – 8 Mathematics (2012-14), K – 5 Science (2013 – 15), 6 – 12 Social Studies (2014 – 16), and ELA and Literacy at all levels will recommend programmatic changes for implementation in FY 19. PE, Health and Fine Arts will enter year two in FY 18.

Many of the textbooks used in classrooms are print versions but we are ever vigilant to research and pilot electronic and interactive texts. Today's comprehensive programs offer a blended environment where students and teachers have print versions of the text, online access to additional materials, online access to interactive activities and electronic assessment systems that allow teachers to better analyze student data. The programs are based on scientific research and include pedagogical approaches and instructional strategies that enable Andover students to meet and master local, state, and national standards. The format and the breadth of the instructional materials and programs have not yet been standardized and are dependent upon the publisher. In addition, textbooks represent a one-time purchase, while on line and interactive texts are a yearly subscription cost per user.

These instructional materials address the full range of learners in Andover's classrooms, with specific attention given to the learning needs of advanced learners, English learners, special education students, and students with learning difficulties. Andover Public Schools is committed to offering a tiered system of support which requires progress monitoring tools and interventions.

Lack of textbooks and other instructional materials that reflect MA current academic standards can be a factor in litigation charging a school system with failure to provide its students with the "opportunity to learn" the knowledge and skills for which they are entitled and for which they are being tested through the Massachusetts Comprehensive Assessment System.

Cost Estimate: \$585,000.00

Town Manager's Recommendation:

The Town Manager recommends including textbooks in the operating budget

Fiscal Year	Dept.Request/Proposed	TM Recommended/Plan
2018	\$626,000	\$0
2019	\$585,000	\$0
2020	\$585,000	\$0
2021	\$580,000	\$0
2022	\$580,000	\$0

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Andover High School Addition/Renovation Project* SCH-4

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19:

Dept. Request: TBD

Submitted by: Sheldon H. Berman, Ed. D
School Committee

Department: School

Funding Source: Exempt Debt

Project Description: Andover High School Addition/Renovation Project

During the month of January 2018 the Andover School Committee anticipates taking action on a recommendation made by the Andover High School Facilities Study Committee for additions/renovations and updating of building systems to relieve overcrowding and improve instructional programs at Andover High School. Said project will include: 1) Hiring of an Owner's Project Manager (OPM); 2) Development of a contract between the Owner and an Architectural firm for designer services from schematic design through design development, construction contract documents; and bidding and awarding of a construction contract, construction administration, final closeout and warranty period of the potential project, and 3) bidding and contracting for construction/renovation with a construction firm.

Project Justification and Purpose:

In December 2017, the Andover School Committee voted to submit a Statement of Interest to the MSBA to build a new West Elementary school; and to address the overcrowding, aging building systems, and limitations in programming capabilities at Andover High School without MSBA support. In order to advance the high school project, the School Committee voted to convene a committee to develop a proposed solution that will meet the needs of the high school and community.

The mission of the Andover High School Facilities Study Committee is to review the facility needs at Andover High School and recommend potential renovations to update building systems, relieve overcrowding, and improve instructional program capabilities — including the possibility of Pre-K programming on the high school campus. During the month of August 2017 the Study Committee prepared a Request for Qualifications (RFQ) for Designer Services for a Feasibility Study for Andover High School. The purpose of the feasibility study is to develop, evaluate and present to the Study Committee a design solution for a renovation and addition that can best address the facility and enrollment needs within reasonable budget constraints.

The next step is to contract with an architect for design services leading up to construction and completion of a proposed solution.

The Town of Andover is not intending to seek the approval of a Project by the Massachusetts School Building Authority (MSBA). However, the recommended design specifications for construction shall include all alternatives and contain all information required by 963 CMR 2.10 (8) and any other applicable rules, regulations, policies, guidelines and directives as promulgated by the MSBA, including, but not limited to, a final design program, space summary, budget

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statement for educational objectives, and a proposed total project budget. Further, the final design shall also include information required by the MSBA such as a site development plan, code analysis, utility analysis, schematic building floor plans, schematic exterior building elevations, narrative building systems descriptions, NE-CHPS (Northeast) or LEED for Schools scorecard, outline specifications, cost estimates and a project schedule.

As noted in the above project description this article will include the funds necessary to support all phases of the project from design through final construction.

An estimate of total project costs will not be available until late January 2018. Therefore, this requested CIP has been submitted as a placeholder on behalf of the School Committee with the estimated cost to include: Owner's Project Manager, designer services from the Schematic Design Phase through design development, construction contract documents, bidding, and award of a construction contract, construction administration, and final closeout and warranty period of the project.

Cost Estimate: TBD

Timing and Financing:

Fiscal Year	Dept.Request/Proposed	TM Recommended/Plan
2019	TBD	
2020		
2021		
2022		
2023		

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **Major School Projects**

SCH-5

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$
Original Dept. Request: \$722,000

Submitted by: Sheldon H. Berman, Ed.D./
School Committee

***Asterisk/gray highlighted cells identify requests that differ from P & F recommendation**

Department: School and P&F
Funding Source: General Fund Borrowing

Revised by Chairs 10.26.17

Project Description:

	Priority	FY2019	FY2020	FY2021	FY2022	FY2023
All Schools installation of audio enhancement systems in all classrooms	1	\$202,000	\$185,000	\$165,000		
All Schools construct storage buildings	4				\$800,000	\$800,000
AHS Collins Center replacement of stage curtains	1	\$75,000				
AHS refurbish and replace café heating system	4				\$180,000	
Bancroft School create additional parking	2		\$400,000			
* Doherty installation of an elevator	1	\$0				
Doherty School Update of Digital Learning Commons (Library)*	1	\$150,000				
Doherty replacement of 6 main air handlers in auditorium	2		\$300,000			
Doherty School Update HVAC in Main Office *	3			\$175,000		
Doherty School Update of all Restroom Fixtures *	3			\$100,000		
Doherty School Veterans Memorial Hall Auditorium Air Conditioning *	3			\$300,000		
Doherty school replacement of all air handlers in gymnasium	4				\$300,000	
DMS Facility Design Assessment	1	\$80,000				
Sanborn replacement of modular classrooms	3			\$800,000		
Shawsheen installation of an elevator	2		\$1,500,000			
Shawsheen Installation of chair lift from 1 st level to level 1.5	1	\$50,000				
Shawsheen School Generator *	4				\$250,000	
Sanborn Replace air handlers in café and gym	1	\$65,000				

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West Elementary replace all 35 cabinet wall heaters	3			\$75,000		
West Elementary Window Replacement *	4				\$100,000	\$100,000
West Middle Café Ceiling	1	\$100,000				
West Middle refurbish the Gym and Auditorium foyers	4				\$150,000	
West Middle install AC in auditorium	5					\$200,000
Wood Hill/High Plain playground surfacing replacement	4				\$100,000	
Totals		\$722,000	\$2,385,000	\$1,615,000	\$1,880,000	\$1,100,000

* Most of the CIP FY2018 requests for projects at Doherty Middle School, West Elementary School and Shawsheen Elementary School had been pushed out from CIP FY2017, contingent upon receiving the Comprehensive Facilities Master Plan, which came out in June of 2016, but were cut from CIP FY2018.

Project Justification and Purpose:

All Schools – Installation of audio enhancement systems – Funds are requested to purchase and install audio enhancement systems in all classrooms. Each year acoustical treatments are required to assist hearing impaired children in the classrooms. The audio enhancement systems allow for all children in the classroom to hear the teacher perfectly. In FY18 Andover received a Massachusetts Office on Disabilities grant to assist with the first phase, and the systems will be installed in the Wood Hill, High Plain, Sanborn, South and Bancroft schools. FY19 funds will allow us to install them in the West Middle and Doherty schools. In FY20 we will do AHS and West Elementary, followed by Shawsheen in FY21.

All Schools construct storage buildings – Funds will be requested to construct storage buildings at seven of our school sites. Wood Hill, High Plain and Bancroft are the only schools that currently have storage buildings located on the campus. Wooden sheds and storage trailers, which are not climate controlled, are being used at the remaining schools and supplies have been damaged due to moisture.

Andover High School Collins Center replacement of stage curtains – Funds are requested for the replacement of the Collins Center black masking curtains. The curtains are original to the building and are truly beginning to show their age despite the countless hours that have been spent sewing and mending them. Funds were requested, but cut from CIP FY2018.

Andover High School Refurbish and replacement of Café heating system – Funds will be requested to replace the current unit ventilators with a more efficient ceiling duct and window wash system. The current unit ventilators are being used as seating areas and food particles become embedded in them, which results in the unit shutting down.

Bancroft School create additional parking – Funds are requested to add more parking spaces to the site. There is insufficient parking during school events, so parents and staff members park their vehicles on the grass and the basketball court. This is especially problematic during the winter months because of snow.

Doherty Middle School update of Digital Learning Commons (Library) – The current configuration of space and furnishings in the Digital Learning Commons does not meet the needs for student learning. Access to the classroom locations within the space often interferes with classes or groups that are using the larger area (and vice-versa). Work and learning stations don't provide for flexible use. The existing tables are large, wooden and heavy and are not conducive to moving the arrangement in order to meet

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student group or individual needs. Chairs are also wooden, are too large for some of our smaller students, and too small for some of our larger students. Both chairs and tables frequently need to be repaired due to breakage. Lighting is also inadequate in the space and will be upgraded to LED technology. Funds were requested, but cut from CIP FY2017 and CIP FY2018.

Doherty Middle School Replacement of six main air handlers in auditorium – Funds are requested to replace these units because they are original equipment from construction of the building. We are also looking to air condition the auditorium the following year, so the new units will be prepped for it.

Doherty Middle School Update HVAC in the Main Office – Funds are requested to update and/or replace the current units in the main office suite; the main office, conference room, Principal and Assistant Principals' offices. The current units are more than 10 years old and provide heat and air conditioning for the office suite. The units are loud and interfere with hearing/speaking on the phone, they are not energy efficient, and when cooling, they generate excess moisture and puddles on the floor.

Doherty Middle School update of all restroom fixtures – Funds are requested to replace all bathroom fixtures with efficient and automatic sinks, toilets, urinals and soap dispensers. The restrooms in Doherty Middle School have old fixtures that often do not work and are prone to leaking, clogging and falling off the wall. Funds were requested, but cut from CIP FY2017 and CIP FY2018.

Doherty Middle School - Veterans Memorial Hall auditorium air conditioning – Funds are requested for the installation of air conditioning in the Memorial Hall auditorium. Originally part of the renovation project of Memorial Hall, this has been part of CIP. Veterans Memorial Hall auditorium is used by many in the greater Andover community including, but not limited to, the Senior Center, Town officials, Veterans' organizations and Doherty Middle School.

Doherty Middle School replacement of Gym air handlers – Funds are requested to replace the current air handlers that service the gymnasium, which are 40 years old, with new energy efficient units. The existing air handlers have required an increasing amount of maintenance during the past few years.

Doherty Middle Facility Design Assessment - The Doherty Middle School is a seriously outdated facility both in terms of operational systems such as heating, ventilation, plumbing, lighting, fire protection and accessibility. It is also outdated in terms of providing a sound academic program that allows sufficient space for teaming, flexible programming, and effective support services. Built in 1951 and renovated in 1971, the current layout of the building creates problems in the areas of student circulation, unsupervised stairwells, multiple exterior entryways, and compliance with ADA standards. The instructional spaces are compromised by a lack of adequate lighting, temperature control, and functional space for current instructional programs. There is a particular lack of space in such areas as science, robotics, and physical education.

This assessment will provide multiple design options for long term renovation and maintenance in order to enable the district to invest funds incrementally in a way that aligns with the long term vision for the school.

Sanborn Elementary School replacement of the modular classrooms – The modular building that currently houses two classrooms at Sanborn Elementary School was installed in the year 2000. The building has begun to show signs of rot around the bottom and along the roof line, which means they have reached the end of their life cycle. Funds are requested to erect two permanent classrooms at the end of the c-wing in place of where the current modular classrooms are located.

Sanborn replace air handlers in cafeteria and gymnasium – When Sanborn School was renovated in 1995, these units were not replaced. They are original to the building and are overdue for replacement.

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Shawsheen Elementary School installation of an elevator – Funds will be requested in CIP FY2020 to install an elevator in Shawsheen Elementary School. There currently exists no access between floors for a mobility challenged person. A child who uses a wheelchair is enrolled at Shawsheen for the 2018-2019 school year and is unable to move between floors.

Shawsheen Installation of a chair lift – Funds are requested to install a single chair lift on the main level, accessible from the exterior near the existing ramp, to the mid-level where the main office and classrooms are located. A student who requires the use of a wheel chair has been enrolled at Shawsheen and needs access to these two levels.

Shawsheen School Generator – Funds will be requested to replace the emergency generator at the school with a new one, to be located outside the building. The current generator is a water-cooled system, which uses domestic water to cool the motor. This type of system is no longer allowed. Replacing the generator will require a complete upgrade to the building's emergency electrical panels and system.

West Elementary School cabinet wall heaters replacement – Funds are requested to replace all 35 cabinet wall heaters. The heaters are rusted and rotting and they look deplorable.

West Elementary School window replacement – Funds are requested to continue replacing the single pane windows throughout the building with energy efficient double pane glass and frames. This replacement project originally started approximately ten years ago, however, after only 25% of the windows had been replaced, funding was cut from subsequent CIP requests and the project could not be completed.

West Middle School café ceiling – Funds are requested to replace the ceiling in the café at West Middle School. These funds have been requested, but cut from CIP FY2014, FY2015, FY2016, FY2017 and FY2018. The existing ceiling is a splined ceiling, which is sagging in numerous areas. This type of ceiling does not allow for easy access to conduct repairs to plumbing, electrical and HVAC equipment. In addition, there is asbestos pipe insulation above this ceiling and if any portion of the ceiling were to fall, this could cause a health hazard.

West Middle School refurbish gym and auditorium foyers – Funds are requested to refurbish the tile, wood wall panels and ceilings in both foyers. They are original to the school, which was constructed back in 1956.

West Middle School installation of air conditioning in the auditorium – Funds are requested to install air conditioning in the auditorium at West Middle School. The boilers and air handlers were upgraded recently and it will be an easy retrofit to add the condenser and coils for air conditioning.

Wood High/High Plain playground surfacing replacement – Funds are requested to replace the pour in place rubber surfacing at all the school playgrounds. The current surfacing has reached its end of life and has started to become hard, which does not allow it to meet current impact attenuation guidelines.

Cost Estimate: \$722,000

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Estimated Annual Cost of Operation and Maintenance:

Timing and Financing:

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$722,000	\$722,000
2020	\$2,385,000	\$2,385,000
2021	\$1,615,000	\$1,615,000
2022	\$1,880,000	\$1,880,000
2023	\$1,100,000	\$1,000,000

ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *School Site Improvement Plan*

SCH-6

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: FY20 Request
Submitted by: Edwin Ataide
Department: School
Funding Source: General Fund Borrowing

Project Description:

A site improvement master plan was completed in early 2012 by Pare Corporation in preparation for this project. This is the sixth year of a multi-phased master plan to update all the school sites to bring them up to current ADA compliance and to improve safety. In addition, the pavement and sidewalks on these sites have deteriorated, making them unsafe for the staff and students. There have been numerous complaints of sinking catch basins and of sinkholes developing because of the deteriorated pavement. This results in costly repairs. Also, the drainage at these sites is in need of updating to meet current environmental regulations. When the majority of these school sites were constructed, the number of parents dropping students off at school was significantly smaller. The sites were not designed to handle this volume and flow, which can cause serious safety issues as buses and cars cross paths and traffic backs up into the roadways.

The West Middle school was completed during the summer of 2013.
The Doherty Middle school was completed during the summer of 2014.

	Priority	FY19	FY20	FY21	FY22	FY23
Sanborn Elementary School	1		\$2,200,000			
South Elementary School			\$240,000	\$2,400,000		
Wood Hill/ High Plain Schools					\$440,000	\$4,400,000
Totals			\$2,440,000	\$2,400,000	\$440,000	\$4,400,000

Project Justification and Purpose:

Sanborn Elementary School – Funds are being requested to complete the construction portion of the Sanborn Elementary school site improvement project. This was identified in the school-wide master plan that was completed in 2012. The existing site has numerous deficiencies including, but not limited to, broken pavement, site drainage, curbing and walkways. Currently the site drains toward the building, which results in water flooding into the basement and crawl spaces. If not addressed this will cause air quality issues. Funds were allocated to begin designing the West Elementary school site in FY16. Due to the possibility of the replacement of West Elementary, we are requesting that the funds be reallocated to design the Sanborn Elementary school site.

South Elementary School – Funds are being requested in FY20 to complete the design for the site renovation of the South Elementary school. This was identified in the school-wide master plan that was completed in 2012. Funds for construction of the site renovation will be requested in FY21. The existing sidewalk, driveways and parking lots have numerous deficiencies, including, but not limited to; broken pavement, curbing and walkways. A portion of this plan was completed in 2016, which included the addition of a rear driveway and resurfacing the playground. The site lacks adequate parking, both for everyday use as well as event parking. Additional parking at the site will be a part of this final phase of the project. All work at this site requires special permitting due to an endangered habitat on the property.

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The design costs for this project have been included in the FY20 budget to have designs ready for construction in FY21.

South Elementary School – Funds are being requested to complete the construction portion of the South Elementary school site improvement project. This was identified in the school-wide master plan that was completed in 2012. The existing sidewalk, roadways and parking lots have numerous deficiencies including, but not limited to; broken pavement, site drainage and broken curbing. Design of this project is planned for FY20.

Wood Hill/High Plain schools – Funds are being requested in FY22 to complete the design portion of the site renovation at the Wood Hill/High Plain schools. This need was identified in the school-wide master plan that was completed in 2012. Funds for construction will be requested in FY23. The existing sidewalk, driveways and parking lots have numerous deficiencies, including, but not limited to; broken pavement, curbing and walkways. The constructions costs for this project will be included in the FY23 budget.

Wood Hill/High Plain schools – Funds are being requested in FY23 to complete the construction portion of the Wood Hill/High Plain schools site improvement project as described above. Funding for the Design portion of the project is being requested for FY22.

Cost Estimate: FY20 - \$2,440,000
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Town Manager's Recommendation:

The Town Manager does not support funding this request for FY20 – FY23.

Fiscal Year	Dept.Request/Proposed	TM Recommended/Plan
2019		
2020	\$2,440,000	\$0
2021	\$2,400,000	\$0
2022	\$440,000	\$0
2023	\$4,400,000	\$0

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TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Multi-School Sprinkler and Fire Alarm Study*

SCH-9

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0
Original Dept. Request: \$80,000
Submitted by: Edwin Ataide/
Michael Mansfield, Fire
Chief
Department: Municipal Services - P&F
Funding Source: General Fund Revenue

Project Description:

Funds are requested to study the current and/or lack of fire suppression and alarm systems in our schools.

Project Justification and Purpose:

Multi-School Sprinkler and Fire Alarm Study – Currently the West Middle, West Elementary, Doherty Middle and Shawsheen Elementary schools do not have sprinkler systems. Only a portion of Andover High School is currently protected by a sprinkler system; the additions and the sections that were renovated in 1995 have a fully functional sprinkler system. Many of the fire alarm systems in our buildings are antiquated and do not accept the newer alarm technology, nor can additional devices be added to them.

This study will:

- Evaluate all of the above mentioned school buildings
- Develop a comprehensive multi-year plan to begin addressing these life safety deficiencies
- Identify budgetary figures that may be required in future years to complete this capital project

Cost Estimate & Timing: \$80,000

Town Manager's Recommendation:

The Town Manager does not support funding for this project.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$80,000	\$0

ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *School Facilities Maintenance Trust Fund*

SCH-10

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$
Original Dept. Request: \$ TBD
Submitted by: Sheldon H. Berman, Ed.D./
School Committee
Department: Municipal Services - P&F
Funding Source: General Fund Revenue

Project Description:

To see if the Town will vote to create a local fund titled "School Facility Maintenance Trust Fund" for the purpose of funding appropriate school facility maintenance projects that meet the provision of 963 CMR 2.00, Section 2.18 2(d), and further that the Town affirm its intent to accept all matching grant funds from the Massachusetts School Building Authority (MSBA) for which it qualifies, relative to the regulations outlined in 963 CMR 2.00, Section 2.18 2(d), and deposit said funds into the "School Facility Maintenance Trust Fund" for use in funding such projects, or take any other action related thereto.

Project Justification and Purpose:

This request proposes to establish a School Facilities Maintenance Trust Fund to facilitate the funding of future school maintenance. The Massachusetts School Building Authority (MSBA) the Authority, in its sole discretion, may determine that an Eligible Applicant is eligible to receive a matching cash grant in excess of the Total Facilities Grant in an amount not to exceed one incentive percentage point (1%) of approved, eligible project costs for the establishment of a local "School Facility Maintenance Trust". Andover hopes to receive this bonus as part of any MSBA funding that may be approved for the West Elementary School Project. Said trust shall be a segregated local fund used solely for the preventative maintenance and upkeep of an Eligible Applicant's school facilities and which shall supplement current maintenance expenditures by the Eligible Applicant. To be eligible to receive "School Facility Maintenance Trust" matching funds, the Eligible Applicant must provide a local one-for-one match for any funds deposited in the Trust by the Authority, and must provide the Authority with detailed budget information on historical and projected maintenance expenditures. Proceeds from said Trust shall not be used for operating or recurring costs, salaries, purchase of routine maintenance supplies, other expenses which the Authority deems to violate the spirit of the Trust, or to supplant any maintenance funding already being expended by the Eligible Applicant.

Cost Estimate & Timing: TBD

Town Manager's Recommendation:

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	TBD	

ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: **West Elementary Feasibility Study**

SCH-11

Department Priority Ranking: 1
(1 = highest, 2 = next highest, etc.)

TM's Rec. for FY19: \$1,200,000
Dept. Request: \$1,200,000
Submitted by: Sheldon H. Berman, Ed. D
Paul P. Szymanski
Department: School
Funding Source: Free cash

Project Description: Feasibility Study-West Elementary School

To see if the Town will vote to appropriate, borrow or transfer from available funds, a sum of money to be expended under the direction of the School Building Committee for the purpose of conducting a Feasibility Study: (1) to understand the extent of deficiencies identified in the Statement of Interest submitted to the Massachusetts School Building Authority for the West Elementary School, located at 58-60 Beacon Street, Andover, MA and as shown on Andover Assessor Map 107, lot 16; and (2) to begin to explore the formulation of a solution to the deficiencies which are relevant to the Statement of Interest for West Elementary School; and for which feasibility study the Town may be eligible for a grant from the Massachusetts School Building Authority. The MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any costs the Town incurs in connection with the feasibility study in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the Town, or take any other action related thereto.

Project Justification and Purpose:

Having convened in an open meeting on March 27, 2017, prior to the closing date, the Board of Selectmen of Andover MA., in accordance with its charter, by-laws, and ordinances, voted to authorize the Superintendent, Sheldon H. Berman, Ed.D, to submit to the Massachusetts School Building Authority the Statement of Interest (SOI) Form dated April 6, 2017 for the West Elementary School located at 58 Beacon St, Andover, MA 01810, which describes and explains the deficiencies and the priority categories for which an application may be submitted to the Massachusetts School Building Authority in the future. In summary, the students attending West Elementary are receiving less than the education they deserve because the building has health and safety issues (lead and copper) is severely overcrowded, especially given its special populations, and its enrollment is projected to increase; and its physical design and amenities are so outdated that its students are unable to benefit from the 21st century educational programming that its teachers long to provide and that its parents have a right to expect.

Cost Estimate: \$1,200,000

Town Manager's Recommendation:

The Town Manager supports funding this request for FY19.

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,200,000	\$1,200,000

ANDOVER PUBLIC SCHOOLS

TOWN OF ANDOVER CAPITAL IMPROVEMENT PROGRAM FY2019 – FY2023

PROJECT REQUEST: *Doherty Middle School Elevator*

SCH-12

Department Priority Ranking: 1
(1 = highest, 2 = second highest, etc.)

TM's Rec. for FY19: \$0 See SCH-13
Original Dept. Request: \$1,800,000
Submitted by: Sheldon H. Berman, Ed.D./
School Committee
Department: Municipal Services - P&F
Funding Source: General Fund Borrow

Project Description:

Funds are requested to install an elevator in the Doherty Middle School

Project Justification and Purpose:

Doherty Middle School is a multi-level building with no elevator. Instead, a very long, old ramp inefficiently serves the needs of our disabled population. The ramp does not meet ADA code requirements and it does not access all levels of the building. A new elevator could be constructed in the building side entrance area, which is accessible from the parking area on the right side of the Town Offices building. Currently a person with mobility issues must go the entire length of the building to reach the ramp at the end, use the ramp, and then travel back to the other end of the building where the journey began. Funding for this important issue has been requested on several CIPs for more than 15 years.

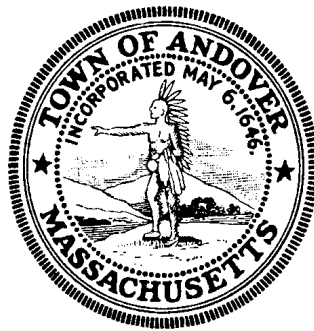
Cost Estimate & Timing: \$1,800,000

Town Manager's Recommendation:

The Town Manager does not support funding this request. See SCH-13 for Doherty Middle Facility Design Assessment

Fiscal Year	Dept. Request/Proposed	TM Recommended/Plan
2019	\$1,800,000	\$0

SECTION 4



CIP BYLAW, DEFINITIONS, AND FINANCIAL POLICIES

CAPITAL IMPROVEMENT PROGRAM. [AMENDED 4-2-1991, ART. 37]

- (a) Preparation and submission. The Town Manager annually shall prepare, with the assistance of the Town Planning Board, a five-year capital improvement program. At the request of the Town Manager, all town boards, committees, commissions and other agencies of the town shall submit to the Manager, in such form and according to such schedule of time as the Manager may require, detailed statements of capital improvements requested for their respective boards, committees, commissions and agencies during the next five fiscal years. The Manager shall submit the five-year capital improvement program to the Board of Selectmen at least three months prior to the final date for submission of the annual budget as prescribed by Town Bylaw. Concurrently, copies of the capital improvement program shall also be transmitted to the Finance Committee and School Committee. The capital improvement program shall include:

- (1) A clear general summary of its contents;
- (2) A list of all capital improvements which are proposed to be undertaken during the five fiscal years ensuing, with appropriate supporting information as to the necessity for such improvements;
- (3) Cost estimates, method of financing and recommended time schedules for each such improvement; and
- (4) The estimated annual cost of operating and maintaining any facilities to be constructed or acquired.

The above information may be revised and extended each year with regard to capital improvements still pending or in process of construction or acquisition.

- (b) Action on capital improvement program:

- (1) Notice and hearing. The Board of Selectmen shall cause to be published in one or more newspapers of general circulation in the town the general summary of the capital improvement program and a notice stating: (a) the times and places where copies of the capital improvement program are available for inspection; and (b) the time and place, not less than two weeks after such publication, for a public hearing on the capital improvement program.
- (2) (Meeting with Finance Committee.) After the public hearing but at least 10 days before adoption of the capital improvement program, the Board of Selectmen shall meet and confer with the Finance Committee concerning the program.

Adoption. The Board of Selectmen by resolution shall adopt the capital improvement program with or without amendment after the public hearing and after conferring with the Finance Committee, at least one month before the required date for submission of the annual budget by the Town Manager.

BYLAW, DEFINITIONS, AND FINANCIAL POLICIES

1. All current operating expenditures will be paid for with current operating revenues. The purpose of this policy is to maintain a financially sound operating position for the town by promoting Andover's ability to 1) balance its budget on a current basis, 2) maintain reserves for emergencies, and 3) have sufficient liquidity to pay bills on time to avoid short-term borrowing costs. The town will avoid budgetary procedures that balance current expenditures at the expense of meeting future years' expenses, such as postponing expenditures, accruing future years' revenues or rolling over short-term debt.
2. The combined balance of Free Cash and Stabilization Fund should be maintained at 3%-7% of general fund operating revenues.
 - a. The Town will endeavor to maintain a certified Free Cash balance equal to 3% - 7% of general fund. The Free Cash balance is an important indicator of whether a town is living within its means. A declining balance means that the town is spending more on an annual basis than it is collecting in revenues. Andover's goal is to maintain its Free Cash balance at 3% - 7% as a reserve which can be tapped in case of emergency and to provide enough cash in the bank to meet payrolls and pay the bills without having to borrow in anticipation of taxes. Together with the Stabilization Fund the 3-7% goal is a widely accepted measure of good financial standing and a factor in Andover's bond rating.
Free Cash provides a financial cushion against events such as a sudden loss of a revenue source, an economic downturn, emergency or other unanticipated expenditures, non-recurring capital expenditures and uneven cash flow. A constant decline or a low level of Free Cash indicates a problem in meeting current expenditures and revenue targets, subsidizing the current operating budget, or utilizing reserves for purposes not planned. A sudden decline in free cash may be temporary or related to planned purposes.
 - b. The Town will endeavor to maintain a Stabilization Fund. Funds held in Stabilization may be appropriated for one-time capital expenses only. The Town may appropriate monies into the Stabilization Fund over two or more years for a specific planned capital project in order to avoid borrowing costs.
3. Free Cash in excess of goal should be used for non-recurring or emergency expenditures or appropriated to a stabilization fund for future capital projects and equipment purchases. This goal, combined with Policy 2, will provide a strategy to avoid creating future operating deficits by over reliance on Free Cash to subsidize the operating budget. The policy should allow, once a reasonable level of Free Cash is attained, for a contingency reserve (either appropriated or unappropriated) to be used for expenditures of a non-recurring nature, capital and equipment purchases, or unexpected, nonrecurring small increases in public service costs.

Fiscal Year	Certified Free Cash Going into Town Meeting	Free Cash as % of Budget	Amount Spent by Town Meeting	Amount Remaining after Town Meeting
2007	5,432,796	4.4%	3,532,368	1,900,428
2008	2,333,996	1.9%	1,763,147	570,849
2009	2,221,828	1.8%	334,000	1,887,828
2010	1,602,874	1.3%	1,123,500	479,374
2011	1,609,894	1.2%	992,000	617,894
2012	1,239,055	0.9%	0	1,239,055
2013	4,073,271	2.6%	3,180,966	892,305
2014	3,963,320	2.4%	3,300,000	663,320
2015	5,761,265	3.3%	4,821,083	940,182
2016	4,843,241	2.9%	3,793,000	1,050,241
2017	5,062,537	2.9%	1,825,000	3,237,537

4. Annual budget should include a Capital Projects Fund from current dollars to maintain an equipment replacement and facilities maintenance schedule equal to 2% of General Fund Operating Budget. Much of the Town's government wealth is invested in our capital plant i.e. buildings, fields, infrastructure, equipment, and vehicles. Long-term debt is an appropriate source of funding for certain types of projects while current revenues should be used for those assets with a short useful life.
5. Annual budget should include 20% of the property taxes from new growth/construction and should be allocated to capital projects fund. This goal will provide for a source of funding that does not compete with the operating budget but increases or decreases in relation to growth in the budget and growth in the

BYLAW, DEFINITIONS, AND FINANCIAL POLICIES

community.

6. Fees and user charges should be reviewed annually in relation to the costs of providing the service. As State and Federal assistance has declined and/or been eliminated, the Town's local non-property tax revenue base has provided more funding for local services. In order to continue to provide these services without an additional burden on the property tax, these fees should be reviewed to cover, when appropriate, any cost increase or decrease associated with delivering that program or service.
7. When positions are funded with grants or user fees, the budget for the use of those revenues should include a transfer to the General Fund to cover employee health insurance costs.

B. FISCAL POLICIES - WATER & SEWER

1. Rates and fees for water and sewer funds should be set at a level to provide for self-supporting operations. The water and sewer funds should be reviewed annually to project revenues and expenditures for the next fiscal year, estimates of current year, and projections for future years. Estimates of capital projects and debt service should be included in order to project the impact on water or sewer rates. Any water or sewer costs not supported by user revenues or betterments would place a requirement on the General Fund for financial support.
2. Betterments will be assessed for water and sewer extensions. In line with Policy 1, water and sewer projects that are extensions on the existing system will be assessed to the property owner according to the betterment formula for water and sewer.
3. Water and sewer main replacements should be scheduled so as to avoid major increases in water and sewer rates. The current water and sewer funds are established as self-supporting on a cash basis. Revenues are planned to cover operating budgets, indirect and overhead costs, and debt service payments. Depreciation is not funded, therefore, a carefully designed replacement plan is necessary to ensure a rate structure adequate to pay all costs including proposed new long-term debt.
4. Water and sewer debt service should not exceed 40% of water and sewer operating revenues. Water and sewer capital plan should attempt to invest in the town's water and sewer system at a rate that does not place dramatic increases on the ratepayer. One method for accomplishing this objective is to relate debt service to operating revenues at the 1994 fiscal year base level. This practice would allow increased investment in the Town's enterprises but in proportion to revenue increases.

C. CAPITAL PLANNING POLICIES

1. General

CAPITAL PROJECT/ITEM: An expenditure of \$15,000 or more with a useful life greater than one year for one of the following purposes:

- Acquisition of land;
- Construction, expansion or renovation of a facility. Facilities include buildings, streets, bridges, sidewalks, parking lots, utilities, playing fields, cemeteries, playgrounds, etc.;
- Acquisition of large capital items including vehicles, technology, communication equipment, etc;
- Facility maintenance projects including roof repair, HVAC, electrical, masonry, painting, carpeting, street resurfacing, sidewalk reconstruction, playground equipment/major repairs;
- Planning, feasibility, engineering or design studies related to a capital project.

CRITERIA FOR SETTING PRIORITIES:

- Highest priority – Projects/items essential to protecting the health/safety of the public, employees and school children; Projects essential to protecting public and private property.
- Second highest priority – Projects/items without which an existing or critically needed service cannot be properly delivered in terms of quality or dependability.
- Third highest priority – Projects/items that produce a cost savings to the Town by reducing future replacement or operating costs; Projects that are responsive to the desires of a significant segment of the community.

FUNDING SOURCES:

- Borrowing – Projects/items of \$25,000 or more with a useful life of at least 10 years may be considered for borrowing. The sources of revenues to support Borrowing are:
 - General Fund – Within Proposition 2½;
 - Sewer Enterprise Fund and Water Enterprise Fund;
 - General Fund – With Debt Exclusion Vote.
- Pay-As-You-Go (PAYGO) – Projects/items of \$15,000 or more with a useful life of at least 5 years may be considered for PAYGO funding. The sources of Pay-As-You-Go funds are:
 - Capital Project Fund supported by General Fund Revenues;
 - Water and Sewer Reserves, Cemetery Receipts, Parking Receipts, Field Rental Receipts; and Cable Franchise Fee Receipts;

BYLAW, DEFINITIONS, AND FINANCIAL POLICIES

- General Fund Capital Outlay Exclusion;
- Free Cash warrant articles.
- **Departmental Operating Budget** – Projects/items of less than \$15,000 with a useful life of greater than one year may be considered for funding in departmental operating budgets. The sources of revenues to support Operating budgets are:
 - General Fund
 - Water and sewer reserves, cemetery receipts, parking receipts, and rental receipts;
 - Departmental revolving receipts
- 2. The annual operating cost of a proposed capital project, as well as debt service costs, will be identified before any long-term bonded capital project is recommended. Capital projects may increase future expenses, decrease future expenses or may be cost-neutral. The funding of capital projects may fall within available revenues (taxes or fees) or new revenue sources (debt or capital exclusions). It is important to project the impact that the proposed capital project has on the operating budget so that operating budget funding sources could also be identified or new funding sources recommended.
- 3. Capital projects should be reviewed in relation to impact on property tax limitation and annual operating budgets.
 - a. Projects funded with current tax revenues should identify the impact on the annual operating budget.
 - b. Projects funded with long-term debt and not exempted from Proposition 2 ½ should identify the impact on annual operating budgets.
 - c. Projects funded with long-term debt and exempted from Proposition 2 1/2 should identify the impact on the annual tax rate and/or tax bill. (Debt Exclusion)
 - d. Projects funded with capital exclusion should identify the impact on current annual tax rate and/or tax bill. (Capital Expenditure Exclusion)
- 4. Funding for discretionary capital projects should be contingent on voter approval of either a debt exclusion or capital expenditure exclusion so that the limited resources available within Proposition 2½ remain available for Town and School operating needs and essential capital projects. Non-discretionary projects are those needed to protect health and safety or to meet legal mandates. Debt Exclusions or Capital Expenditure Exclusions may also be considered for non-discretionary projects on a non-contingent basis.

D. **DEBT MANAGEMENT POLICIES**

1. Long-term debt should not be incurred without a clear identification of its financing sources. Long-term debt is generally utilized to fund capital projects that have a long useful life and are relatively expensive. Because of the debt service costs and annual appropriations necessary to retire this debt, there should be clear knowledge and commitment of revenue sources available to pay these costs without competing with operating budgets for limited resources. See Financing Options and Capital Planning policies for further discussion.
2. Betterments will be assessed on all capital projects where applicable. (e.g. water, sewer, street, sidewalks, etc.) When specific benefits accrue to property owner(s), betterments will be assessed in accordance with State Statutes and local policies. This funding source will contribute all or a portion of the costs associated with the capital project.
3. General Fund debt service will not exceed 10% of General Fund revenues. The credit rating agencies, such as Moody's Investors Services, consider debt service on net direct debt (i.e. non-self supporting) exceeding 20% of net operating revenues as a potential problem. Dramatic increases in debt service also indicate potential problems unless revenue sources increase to keep pace with these additions to fixed costs. The 10% benchmark provides a policy to apply to new projects and the growth of revenues to finance such projects.
4. The Town will attempt to maintain a long-term debt schedule so that at least 50% of outstanding principal will be paid within 10 years. Debt service costs include annual principal and interest payments. Debt service costs are also a significant portion of fixed costs. A reasonable maturity schedule not only reduces interest costs but recognizes that capital needs will continue to be identified and recommended. Credit rating bureaus review these maturity schedules and future capital needs.

Debt Service Fund

The Debt Service Fund provides the appropriation for the Town's annual principal and interest costs associated with various capital construction projects. The projects are funded by the issuance of tax-exempt bonds. The Water and Sewer Enterprises pay for its debt service from user fees and betterments.

SECTION 5



FINANCIAL DATA

FINANCIAL DATA

Three Year Capital History

	FY2016	FY2017	FY2018	Grand Total	Funding Source
COMMUNITY SERVICES	\$70,000	\$50,000	\$212,214	\$267,214	
Pomps Pond Improvements	\$20,000	\$50,000		\$70,000	Taxation
Rec Park Improvements	\$50,000			\$50,000	Taxation
Center at Punchard Feasibility Study/Design			\$40,000	\$40,000	Taxation
Phillips Auditorium Tables and Chairs			\$32,214	\$32,214	Taxation
Design Services for The Park, Playstead and Mun Complex			\$75,000	\$75,000	Taxation
Rec Park/Pomps Pond Security Monitoring System			\$65,000	\$65,000	Cable
FINANCE		\$35,000	\$35,000	\$70,000	
MUNIS Financial Software Improvements		\$35,000	\$35,000	\$70,000	Taxation
TOWN CLERK	\$77,000	\$37,000	\$30,000	\$144,000	
Election Ballot Tabulators	\$77,000			\$77,000	Taxation
Election Voting Booths		\$37,000		\$37,000	Taxation
Vault Shelving			\$30,000	\$30,000	Taxation
TOWN MANAGER		\$3,350,000	\$18,090,000	\$21,440,000	
New Deyermund Fields Lighting		\$200,000		\$200,000	Free Cash
Purchase 5 Campanelli Drive		\$2,250,000		\$2,250,000	Free Cash
Town Yard/Municipal Facilities Design		\$900,000		\$900,000	Taxation
Town Offices Customer Service Bldg Improvement Study			\$40,000	\$40,000	Taxation
Town Yard Site Evaluation			\$50,000	\$50,000	Taxation
Ballardvale Fire Station Design			\$300,000	\$300,000	Free Cash
High Plain/WoodHill Accessibility			\$200,000	\$200,000	Free Cash
Municipal Services Facility			\$17,500,000	\$17,500,000	Borrow
COMMUNITY DEVELOPMENT & PLANNING			\$12,000	\$12,000	
Conservation Land Management			\$12,000	\$12,000	Taxation
LIBRARY	\$25,000	\$25,000	\$0	\$50,000	
Interior Library Renovations	\$25,000	\$25,000		\$50,000	Taxation
INFORMATION TECHNOLOGY	\$926,000	\$1,025,000	\$1,102,018	\$3,053,018	
Annual PC Replacement/Lease Program	\$291,000	\$275,000		\$566,000	Cable
Annual PC Replacement/Lease Program			\$442,018	\$442,018	Taxation
Digital Records Pilot	\$35,000			\$35,000	Taxation
Safety & Security Communications Enhancements	\$600,000		\$300,000	\$900,000	Borrow
Power Infrastructure Refresh		\$120,000		\$120,000	Taxation
Performance Measurement/Business Intelligence Pilot		\$30,000		\$30,000	Taxation
1:1 Learning Initiative		\$400,000		\$400,000	Free Cash
Elementary School Projector Refresh		\$200,000		\$200,000	Free Cash
Website Development Phase 2			\$10,000	\$10,000	Taxation
BOS and SC Meeting Room Upgrades			\$50,000	\$50,000	Cable
Redundant Cable			\$300,000	\$300,000	Cable
POLICE	\$285,000	\$195,000	\$293,500	\$773,500	
Vehicle Replacement	\$195,000	\$195,000	\$195,000	\$585,000	Taxation
Public Safety Center Camera Replacement	\$90,000			\$90,000	Taxation
Police Firearms/DT Scenario Trainer			\$78,500	\$78,500	Taxation
Roadside Message Board			\$20,000	\$20,000	Taxation
PARKING			\$123,000	\$123,000	
Parking Study Implementation			\$123,000	\$123,000	Parking
FIRE	\$200,000	\$595,000	\$333,500	\$1,128,500	
Vehicle Replacement			\$53,000	\$53,000	Taxation
Central Station Floor Sealing				\$0	Taxation
Fire Vehicle Mobile Workstations	\$40,000			\$40,000	Taxation
EMS Call Box for Blanchard Ballfields	\$10,000			\$10,000	Taxation
Public Safety Communications Upgrade	\$150,000			\$150,000	Free Cash
EMS Call Box for Shawsheen Fields		\$20,000		\$20,000	Taxation
Fire Apparatus Replacement		\$575,000	\$270,000	\$845,000	Borrow
EMS Call Box for Pomps Pond			\$10,500	\$10,500	Taxation

FINANCIAL DATA

Three Year Capital History

	FY2016	FY2017	FY2018	Grand Total	Funding Source
PUBLIC WORKS	\$2,540,000	\$2,044,000	\$2,916,288	\$2,689,000	
Major Annual Road Maintenance	\$1,391,000	\$1,389,000	\$1,376,288	\$4,156,288	Chapter 90
Minor Sidewalk Repairs	\$100,000	\$100,000	\$100,000	\$300,000	Taxation
Town Yard/Municipal Facilities Consulting/Planning	\$50,000			\$50,000	Taxation
Highway Vehicles - Small	\$90,000	\$100,000	\$215,000	\$405,000	Taxation
Highway Vehicles - Large	\$175,000	\$350,000	\$450,000	\$975,000	Borrow/Free Cas
New Sidewalk Construction	\$113,000			\$113,000	Taxation/Borrow
Minor Storm Drain Improvements	\$300,000			\$300,000	Borrow
Sidewalk Construction - River St	\$301,000			\$301,000	Borrow - Private
Drainage Infrastructure Inspection		\$50,000		\$50,000	Taxation
Athletic Fields Needs Analysis		\$35,000		\$35,000	Taxation
Spring Grove Cemetery Improvements	\$20,000	\$20,000	\$20,000	\$60,000	Taxation
Storm Water Management			\$100,000	\$100,000	Taxation
Enmore Street Reconstruction			\$655,000	\$655,000	Borrow
WATER/SEWER ENTERPRISE	\$2,255,000	\$3,313,000	\$5,375,000	\$10,943,000	
Water/Sewer Vehicles	\$55,000	\$33,000	\$100,000	\$188,000	Reserves
Water/Sewer Rate Study				\$0	Reserves
Fire Hydrant Infrastructure Maintenance				\$0	Borrow
Hydrant Replacement Program			\$100,000	\$100,000	Reserves
Sewer Master Plan				\$0	Reserves
Major Water Main Replacement	\$1,700,000	\$1,000,000	\$3,000,000	\$5,700,000	Borrow
Major Water Main Replacement		\$500,000		\$500,000	Reserves
Water Treatment Plant GAC Replacement	\$500,000	\$250,000		\$750,000	Reserves
Water Storage Tank Rehabilitation		\$1,450,000		\$1,450,000	Borrow
Water Treatment Plant Window Replacement		\$80,000		\$80,000	Reserves
WTP Electrical Substation Replacement			\$500,000	\$500,000	Borrow
Bancroft High Lift Pumps			\$750,000	\$750,000	Borrow
Minor Sanitary Sewer Collection System Improvements			\$50,000	\$50,000	Reserves
Enmore Street Reconstruction			\$50,000	\$50,000	Reserves
Enmore Street Reconstruction			\$525,000	\$525,000	Re-Purpose Borr
WTP New Heating System			\$300,000	\$300,000	Borrow
PLANT & FACILITIES	\$2,127,000	\$1,625,000	\$1,365,000	\$5,117,000	
Town Projects - Building	\$275,000	\$275,000	\$275,000	\$825,000	Taxation
Town Projects - Mechanical & Electrical	\$145,000	\$170,000	\$170,000	\$485,000	Taxation
Town Vehicle Replacement	\$150,000	\$0	\$105,000	\$255,000	Taxation
Major Town Projects	\$1,200,000	\$700,000	\$320,000	\$2,220,000	Borrow
Town & School Energy Initiatives	\$337,000	\$400,000	\$420,000	\$1,157,000	Borrow/Free Cas
Ballardvale Fire Station Land Purchase				\$0	Free Cash
Ballardvale Fire Station Addition				\$0	Free Cash
Town Playground Replacements				\$0	Borrow
Town Playground Replacements			\$75,000	\$75,000	Taxation
Spring Grove Cemetery Maintenance	\$20,000			\$20,000	Perp Care/Taxati
Athletic Field Maintenance				\$0	Fields Revolving
Time Keeping System - Town & School		\$80,000		\$80,000	Taxation
SCHOOL	\$1,852,000	\$4,198,000	\$3,040,643	\$8,315,643	
School Projects - All Schools	\$435,000	\$575,000	\$622,611	\$1,632,611	Taxation
School - Projects by Building	\$53,000	\$478,000	\$60,000	\$591,000	Taxation
Textbooks	\$590,000	\$67,000	\$379,500	\$1,036,500	Taxation
Student Mobile Carts				\$0	Taxation
AHS Schematic Design				\$0	Borrow
Major School Projects	\$455,000	\$500,000	\$770,000	\$1,725,000	Borrow
School Site Improvement Plan	\$319,000			\$319,000	Borrow
AHS Library/Media Center Renovations	\$0			\$0	Borrow
School Vehicle		\$78,000		\$78,000	Taxation
Collins Center Façade Replacement		\$2,000,000		\$2,000,000	Borrow
Lovely Field Turf Replacement		\$500,000		\$500,000	Borrow
Student Fleet Refresh			\$233,532	\$233,532	Taxation
Elementary School Projector Refresh			\$200,000	\$200,000	Taxation
High Plain/Woodhill Air Condition Upgrade			\$775,000	\$775,000	Borrow
Grand Total	\$10,357,000	\$16,492,000	\$32,928,163	\$59,777,163	

FINANCIAL DATA

Five-Year Financial Plan

	FY 2017 RECAP	FY 2018	Dollar Change	Percent Change	FY 2019	Dollar Change	Percent Change	FY 2020	Dollar Change	Percent Change
REVENUE										
Property Taxes										
Prior Year Levy	124,996,152	130,709,371	5,713,220	4.57%	136,417,582	5,708,210	4.37%	142,057,773	5,640,192	4.13%
2 1/2% Increase	3,124,904	3,267,734	142,830	4.57%	3,410,440	142,705	4.37%	3,551,444	141,005	4.13%
New Growth	2,588,316	2,440,476	(147,840)	-5.71%	2,229,752	(210,724)	-8.63%	2,229,752	0	0.00%
Unused Excess Levy Capacity	(1,323,436)	(631,151)	692,285	-52.31%	(300,000)	331,151	-52.47%	(300,000)	0	0.00%
Exempt Debt Service	3,597,424	4,040,851	443,427	12.33%	3,902,896	(137,955)	-3.41%	3,782,989	(119,907)	-3.07%
Total Property Taxes	132,983,359	139,827,282	6,843,922	5.15%	145,660,669	5,833,388	4.17%	151,321,958	5,661,289	3.89%
State Aid	13,009,841	12,207,377	(802,464)	-6.17%	12,444,415	237,038	1.94%	12,686,194	241,779	1.94%
Local Receipts	10,997,428	11,492,300	494,872	4.50%	12,250,042	757,742	6.59%	12,259,592	9,550	0.08%
Free Cash for CIP & Articles	3,793,000	1,825,000	(1,968,000)	-51.89%	4,200,000	2,375,000	0.00%	-	(4,200,000)	0.00%
Other Revenues - Indirects, Cable, Bond Prem	2,131,924	2,053,486	(78,438)	-3.68%	2,068,087	14,601	0.71%	2,161,883	93,796	4.54%
TOTAL REVENUES	162,915,552	167,405,445	4,489,893	2.76%	176,623,213	9,217,769	5.51%	178,429,627	1,806,414	1.02%
APPROPRIATIONS - Debt/Obligations/Capital										
Capital & Debt Service										
Non-Exempt Debt Service	5,653,925	5,463,961	(189,964)	-3.36%	6,203,497	739,536	13.53%	6,820,761	617,264	9.95%
Exempt Debt Service	4,828,400	4,125,342	(703,058)	-14.56%	3,981,010	(144,332)	-3.50%	3,859,110	(121,900)	-3.06%
Cash Capital Outlay	3,440,000	3,678,875	238,875	6.94%	3,265,077	(413,798)	-11.25%	4,120,109	855,032	26.19%
Total General Fund Capital	13,922,325	13,268,178	(654,147)	-4.70%	13,449,584	181,406	1.37%	14,799,980	1,350,396	10.04%
Obligations - Fixed Costs										
Retirement	8,360,984	9,428,488	1,067,504	12.77%	10,371,337	942,849	10.00%	11,408,470	1,037,134	10.00%
Insurance/Workers Comp	783,831	901,405	117,574	15.00%	964,503	63,098	7.00%	1,032,019	67,515	7.00%
Unemployment Compensation	160,000	160,000	-	-	163,200	3,200	2.00%	166,464	3,264	2.00%
Health Insurance	18,416,609	19,889,938	1,473,329	8.00%	21,481,133	(769,703)	-3.58%	23,199,623	(906,194)	-4.27%
Less: Retiree Savings To OPEB	(511,572)	(632,938)			(160,917)			(339,108)		
Less: New Employee Contribution Split	-	-			20,550,513	1,293,513	6.72%	21,954,321	1,403,809	6.83%
Total Health Insurance	17,905,037	19,257,000	1,351,963	7.55%	20,550,513	1,293,513	6.72%	21,954,321	1,403,809	6.83%
OPEB	1,127,572	1,264,338	136,766	12.12%	1,416,888	150,550	10.34%	1,569,559	152,671	10.75%
OPEB Original	616,000	631,400	15,400	2.50%	647,185	15,785	2.50%	663,365	16,180	2.50%
OPEB Additional Retiree Savings	511,572	632,938	121,366	23.72%	769,703	136,765	17.76%	906,194	136,491	17.73%
Total General Fund Obligations	42,259,749	44,279,409	2,019,660	4.78%	46,916,025	2,636,616	5.95%	50,930,813	4,014,788	8.56%
State Assessments	613,417	578,742	(34,675)	-5.65%	593,211	14,469	2.50%	608,041	14,830	2.50%
Offset Aid - Assistance to Libraries	44,964	45,830	866.00	1.93%	45,830	-	0.00%	45,830	-	0.00%
Technical School Assessment	610,000	610,000	0	0.00%	628,300	18,300	3.00%	647,149	18,849	3.00%
Overlay Reserve	907,823	1,066,190	158,367	17.44%	826,000	(240,190)	-22.53%	1,200,000	374,000	45.28%
Warrant Articles - From Taxation	150,007	31,000	(119,007)	-79.33%	31,000	-	0.00%	31,000	-	0.00%
Warrant Articles - From Free Cash	3,793,000	1,825,000	(1,968,000)	-51.89%	4,200,000	2,375,000	0.00%	0	(4,200,000)	0.00%
Other - Court Judgements & Deficits	-	-	-	-	150,203	150,203	100.00%	150,000	(203)	-0.14%
Total Debt/Obligations/Capital	48,378,960	48,436,171	57,211	0.12%	53,390,568	4,954,398	10.23%	53,612,833	222,264	0.42%
APPROPRIATIONS - Town & School Operations										
Town	38,437,389	39,632,103	1,194,714	3.11%	40,721,986	1,089,883	2.75%	41,841,841	1,119,855	2.75%
School	76,099,203	79,337,171	3,237,968	4.25%	82,510,658	3,173,487	4.00%	85,811,084	3,300,426	4.00%
Total Appropriations for Operations	114,536,592	118,969,274	4,432,682	3.87%	123,232,645	4,263,370	3.58%	127,652,925	4,420,281	3.59%
TOTAL APPROPRIATIONS	162,915,552	167,405,445	4,489,893	2.76%	176,623,213	9,217,768	5.51%	181,265,758	4,642,544	2.63%
BALANCE	0	(0)			0			(2,836,130)		

FINANCIAL DATA

Five-Year Financial Plan

FY 2021	Dollar Change	Percent Change	FY 2022	Dollar Change	Percent Change	FY 2023	Dollar Change	Percent Change	5 Year Average
147,838,969	5,781,196	4.07%	153,764,696	5,925,726	4.01%	159,838,565	6,073,869	3.95%	4.46%
3,695,974	144,530	4.07%	3,844,117	148,143	4.01%	3,995,964	151,847	3.95%	4.46%
2,229,752	0	0.00%	2,229,752	0	0.00%	2,229,752	-	0.00%	-1.73%
(300,000)	0	0.00%	(300,000)	0	0.00%	(300,000)	-	0.00%	-
3,530,110	(252,879)	-6.68%	3,003,961	(526,149)	-14.90%	2,681,726	(322,235)	-10.73%	-6.73%
156,994,806	5,672,847	3.75%	162,542,526	5,547,720	3.53%	168,446,007	5,903,481	3.63%	4.09%
12,932,808	246,614	1.94%	13,184,355	251,547	1.95%	13,440,932	256,577	1.95%	2.02%
12,269,381	9,789	0.08%	12,279,414	10,033	0.08%	12,289,699	10,284	0.08%	1.39%
-	0	0.00%	-	0	0.00%	-	-	-	-
2,169,815	7,932	0.37%	2,159,239	(10,576)	-0.49%	2,095,356	(4,254,595)	197.04%	0.41%
184,366,810	5,937,182	3.33%	190,165,534	5,798,724	3.15%	196,271,994	1,915,748	1.01%	3.35%
7,773,918	953,157	13.97%	8,420,492	646,574	8.32%	8,398,272	(22,220)	-0.26%	10.74%
3,601,449	(257,661)	-6.68%	3,068,924	(532,525)	-14.79%	2,740,313	(328,611)	-10.71%	-6.71%
3,934,316	(185,793)	-4.51%	3,669,433	(264,883)	-6.73%	3,455,598	(213,835)	-5.83%	-1.21%
15,309,683	509,703	3.44%	15,158,849	(150,834)	-0.99%	14,594,183	(564,666)	-3.72%	1.78%
12,549,318	1,140,847	10.00%	13,804,249	1,254,932	10.00%	15,184,674	1,380,425	10.00%	12.21%
1,104,260	72,241	7.00%	1,181,558	77,298	7.00%	1,264,267	82,709	7.00%	8.05%
169,793	3,329	2.00%	173,189	3,396	2.00%	176,653	3,464	2.00%	2.08%
25,055,593	-	-	27,060,041	-	-	29,224,844	-	-	-
(951,054)	-	-	(999,079)	-	-	(1,079,005)	-	-	-
(595,703)	-	-	(942,106)	-	-	(1,391,044)	-	-	-
23,508,836	1,554,515	7.08%	25,118,856	1,610,019	6.85%	26,754,795	1,635,939	6.51%	7.79%
1,631,003	-	-	1,696,026	-	-	1,793,376	-	-	-
679,949	16,584	2.50%	696,947	16,999	2.50%	714,371	17,424	2.50%	2.63%
951,054	44,860	4.95%	999,079	48,025	5.05%	1,079,005	79,926	8.00%	14.10%
54,272,893	2,832,377	5.56%	57,132,728	3,010,669	5.55%	59,767,948	3,199,887	5.60%	7.00%
623,242	15,201	2.50%	638,823	15,581	2.50%	654,793	15,971	2.50%	2.63%
45,830	-	0.00%	45,830	-	0.00%	45,830	-	0.00%	0.00%
666,563	19,414	3.00%	686,560	19,997	3.00%	707,157	20,597	3.00%	3.19%
900,000	(300,000)	-25.00%	900,000	-	0.00%	900,000	-	0.00%	-3.12%
31,000	-	0.00%	31,000	-	0.00%	31,000	-	0.00%	-
-	-	0.00%	-	-	0.00%	-	-	0.00%	-
150,000	-	0.00%	150,000	-	0.00%	150,000	-	0.00%	-
56,689,528	2,566,992	4.79%	59,584,941	3,046,247	5.37%	62,256,729	3,236,454	5.43%	5.71%
42,992,491	1,150,651	2.75%	44,174,785	1,182,294	2.75%	45,389,591	1,214,807	2.75%	2.91%
89,243,528	3,432,443	4.00%	92,813,269	3,569,741	4.00%	96,525,799	3,712,531	4.00%	4.33%
132,236,019	4,583,094	3.59%	136,988,053	4,752,035	3.59%	141,915,391	4,927,337	3.60%	3.60%
188,925,547	7,150,086	3.94%	196,572,994	7,798,282	4.13%	204,172,120	7,599,125	3.87%	3.87%
(4,558,737)	-	-	(6,407,460)	-	-	(7,900,126)	-	-	-

REVENUE AND EXPENDITURE PROJECTIONS

	11/3/16	10/3/17	10/3/17	10/3/17					
	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023		
REVENUES	RECAP	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION		
PROPERTY TAXES									
Prior year Tax Levy Limit	124,996,152	130,709,371	136,417,582	142,057,773	147,838,969	153,764,696	159,838,565	Beginning tax levy limit based on full levy FY18	
Annual Increase	3,124,904	3,267,734	3,410,440	3,551,444	3,695,974	3,844,117	3,995,964	Additional 2.5% allowed by law	
Certified New Growth	2,588,316	2,440,476	2,229,752	2,229,752	(300,000)	(300,000)	(300,000)	New growth estimate based on 3-yr. avg.	
Unused Tax Levy Capacity	(1,323,436)	(631,151)	(300,000)	(300,000)	(300,000)	(300,000)	(300,000)	Unused Levy ATM 2015	
TOTAL	129,385,935	135,786,431	141,757,773	147,538,969	153,464,696	159,538,565	165,764,281		
ADDITIONAL PROP 2 1/2 PROPERTY TAXES									
Debt Service Exclusion (Existing)	4,828,401	4,125,342	3,981,010	3,859,110	3,601,449	3,068,924	2,740,312	Existing bonded projects	
Debt Service Exclusion estimate (To be borrowed)	(88,874)	(84,491)	(78,114)	(76,121)	(71,339)	(64,963)	(58,586)	Per Town Act calculation	
Less Premium Adjustment	(1,142,103)	-	-	-	-	-	-	Final SBAB Reimbursement - FY17	
TOTAL	3,597,424	4,040,851	3,902,896	3,782,989	3,530,110	3,003,961	2,681,726		
STATE AID									
Chapter 70 Education Aid	9,768,234	10,066,835	10,268,172	10,473,535	10,683,006	10,896,666	11,114,599	2% Increase	
Charter Tuition/Capital Assessment Reimbursement	8,037	5,358	5,358	5,358	5,358	5,358	5,358	Level	
School Construction Reimb SBAB	1,142,103	-	-	-	-	-	-	Actual Debt Offset - Final Payment FY17	
Reserve for Direct Expenditures (C/S Offsets)	44,964	45,830	45,830	45,830	45,830	45,830	45,830	Level	
Veterans Benefits	78,521	57,015	57,015	57,015	57,015	57,015	57,015	Level	
Vet, Blind, Surv Spouse Exempt	41,767	39,318	39,318	39,318	39,318	39,318	39,318	Level	
State Owned land	208,157	207,959	207,959	207,959	207,959	207,959	207,959	Level	
General Municipal Aid	1,718,058	1,785,062	1,820,764	1,857,179	1,894,322	1,932,209	1,970,853	2% Increase	
TOTAL	13,009,841	12,207,377	12,444,415	12,686,194	12,932,808	13,184,355	13,440,932		
GENERAL LOCAL REVENUES									
Motor Vehicle Excise	5,000,000	5,043,600	5,309,811	5,309,811	5,309,811	5,309,811	5,309,811	5 Year Average	
Licenses/Permits	2,237,000	2,445,000	2,732,111	2,732,111	2,732,111	2,732,111	2,732,111	"	
Penalties/Interest	430,000	416,100	426,345	426,345	426,345	426,345	426,345	"	
Fines	300,000	236,100	339,848	339,848	339,848	339,848	339,848	"	
General Government	230,000	300,000	292,378	292,378	292,378	292,378	292,378	"	
Fees	78,500	75,000	82,813	82,813	82,813	82,813	82,813	"	
Investment Income	70,428	75,000	81,252	81,252	81,252	81,252	81,252	"	
Meals Tax	520,000	537,000	550,528	550,528	550,528	550,528	550,528	"	
Hotel/Motel Excise	1,580,000	1,570,000	1,699,677	1,699,677	1,699,677	1,699,677	1,699,677	"	
Medicaid Reimbursement	300,000	352,500	353,279	353,279	353,279	353,279	353,279	"	
Library	1,500	-	382,000	391,550	401,339	411,372	421,657	Increase 2.5%	
Miscellaneous/PILOTS	250,000	11,492,300	12,250,042	12,259,592	12,269,381	12,279,414	12,289,699		
TOTAL	10,997,428	11,492,300	12,250,042	12,259,592	12,269,381	12,279,414	12,289,699		
OFFSET LOCAL REVENUES									
Community Services	550,000	582,930	580,000	580,000	580,000	580,000	580,000	Based on avail bal/reserved direct exp within dept. budgets	
Elder Services	97,000	97,000	80,000	80,000	80,000	80,000	80,000	"	
Municipal Facilities	52,000	47,600	72,000	72,000	72,000	72,000	72,000	"	
Spring Grove Cemetery	46,000	46,000	50,000	50,000	50,000	50,000	50,000	"	
Police Off-Duty Fee	75,000	75,000	80,000	80,000	80,000	80,000	80,000	"	
Ambulance	1,250,000	1,300,000	1,100,000	1,100,000	1,100,000	1,100,000	1,100,000	"	
TOTAL	2,070,000	2,148,530	1,962,000	1,962,000	1,962,000	1,962,000	1,957,000		
ENTERPRISE FUNDS									
Water and Sewer Rates and Operating Reserves	13,830,928	14,258,789	14,553,160	14,853,889	15,138,567	15,561,975	15,638,753		
TOTAL	13,830,928	14,258,789	14,553,160	14,853,889	15,138,567	15,561,975	15,638,753		
OTHER AVAILABLE FUNDS- BUDGET									
Off-Street Parking Fund (Operating Budget)	210,000	170,816	210,000	210,000	210,000	210,000	210,000	Reserved direct expenditure in GF Dept Budget	
Cable - Technology P&I	479,561	321,838	239,637	235,850	189,000	122,000	-	Actual Debt Offset - Final Payment FY22	
Cemetery Perpetual Care	6,000	6,000	6,000	6,000	6,000	6,000	6,000	Cemetery Maintenance	
Andover Youth Foundation	30,000	34,482	30,000	30,000	30,000	30,000	30,000	Youth Center Exp	
CD&P Wetland fees	750,561	558,136	510,637	506,850	460,000	393,000	271,000	Wetlands	
TOTAL	750,561	558,136	510,637	506,850	460,000	393,000	271,000		
OTHER AVAILABLE FUNDS-ARTICLES									
Insurance Recovery Fund	21,356	-	-	-	-	-	-		
Cable IT	274,782	415,000	200,000	300,000	300,000	300,000	300,000	Cable Funds IT-2	
Water/Sewer Reserves and Articles	863,000	300,000	445,000	893,000	895,000	330,000	500,000	Water DPW-12-S195K, DPW-17-S100K, Sewer DPW-24-S50K, DPW-30-S100K	
Water/Sewer Reserves Operating	-	-	241,239	679,661	1,073,885	1,139,885	1,139,650	Water/Sewer Projections 11/2/17	
Parking Funds	-	123,000	75,000	75,000	-	75,000	75,000	Per FY19-FY23 CIP	
Debt Re-Purpose	-	1,025,000	-	-	-	-	-		
Bond Premium Stabilization	100,000	100,000	100,000	100,000	100,000	100,000	100,000	Estimate	
TOTAL	1,259,138	1,963,000	1,061,239	2,047,661	2,372,895	1,878,885	2,114,650		
FREE CASH									
Capital Projects Articles	3,525,000	575,000	4,200,000	-	-	-	-		
Operating Budget - FY17	-	1,250,000	-	-	-	-	-		
Bond Stabilization Fund	268,000	-	-	-	-	-	-		
TOTAL	3,793,000	1,825,000	4,200,000	-	-	-	-		
* GRAND TOTAL REVENUES *	178,694,255	184,280,414	192,642,162	195,638,144	202,130,457	207,802,155	214,158,041		
INCREASE OVER PRIOR YEAR	3.40%	3.10%	4.50%	1.60%	3.30%	2.80%	3.10%		

REVENUE AND EXPENDITURE PROJECTIONS		11/3/16	10/3/17	10/3/17					
EXPENDITURES		FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY19 ASSUMPTIONS
OBLIGATIONS		RECAP	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	PROJECTION	
Retirement		8,360,984	9,428,488	10,371,337	11,408,470	12,549,318	13,804,249	15,184,674	Based on ARB 7.25% Funded 2032 10% Increase Per Year
Insurance/Workers Comp		783,831	901,405	964,503	1,032,019	1,104,260	1,181,558	1,264,267	Increase 12% FY18 - 7% All Other Years
Unemployment Compensation		160,000	160,000	163,200	166,644	169,793	173,189	176,653	Increase 2% FY19 - FY23
Health Insurance		18,416,609	19,889,938	21,481,133	23,193,623	25,055,593	27,060,041	29,224,844	Increase 8%
Health Insurance Savings Offset to OPEB		(511,572)	(632,938)	(769,703)	(906,194)	(951,054)	(999,079)	(1,079,005)	Retiree Savings to OPEB/Contribution Change
Health Insurance Savings New Employee Contributions		-	-	(160,917)	(339,108)	(597,033)	(942,106)	(1,391,044)	BIT 7/1/17 Emp 30%/Town 70% HMO Plans 20 New per Yr
Other State Assessments		613,417	578,742	693,211	808,041	900,000	900,000	900,000	Final Cherry Sheet/Increase 2.5%
OPEB Original		1,066,190	1,066,190	826,000	1,200,000	1,200,000	900,000	900,000	Reval Year 2020
OPEB Additional Retiree Savings		616,000	631,400	647,185	663,365	679,949	696,947	714,371	Increase 2.5%
Technical Schools		610,000	610,000	628,300	647,149	666,563	686,560	707,157	Per OPEB Funding Schedule
Water and Sewer Operating Budget		7,670,495	8,167,538	8,388,201	8,615,148	8,848,560	9,088,624	9,335,529	Increase 3%
Reserve for Direct Expenditures		44,964	45,830	45,830	45,830	45,830	45,830	45,830	Cherry sheet offsets (School Lunch excluded)
Other Local Expenditures (Deficits to be Raised)		-	-	150,203	150,000	150,000	150,000	150,000	Overlay/court judgments/deficits to be raised
TOTAL		38,184,123	41,479,531	44,098,185	47,397,001	50,197,405	53,483,716	56,967,075	
DEBT SERVICE									
Existing Non-Exempt General Fund Debt		4,427,149	4,786,151	4,525,684	4,077,824	3,833,845	3,759,708	3,416,330	Actual Debt
Appropriated/Not Borrowed Non-Exempt General Fund		562,215	170,972	232,817	227,800	477,783	739,092	723,234	Includes Landfill
New General Fund CIP PROJECTS		-	-	1,020,359	2,094,287	3,088,290	3,614,692	4,073,708	Includes Municipal Services Facility and Ballardvale Fire
Cable Funds - Technology		479,561	321,838	239,637	235,850	189,000	122,000	-	Actual
BAN Interest non-exempt		80,000	80,000	80,000	80,000	80,000	80,000	80,000	
BAN Interest non-exempt		80,000	80,000	80,000	80,000	80,000	80,000	80,000	
General Fund Bond Issue Expense		105,000	105,000	105,000	105,000	105,000	105,000	105,000	
Existing Water and Sewer Debt		4,128,570	4,198,789	4,062,458	3,973,364	3,848,854	3,654,660	3,066,327	Actual debt
New Water and Sewer CIP PROJECTS		144,500	225,814	580,290	1,084,005	1,528,233	1,920,337	2,346,191	
Water and sewer BAN interest/bond expense		35,000	35,000	35,000	-	-	35,000	35,000	
New Exempt Debt		-	-	-	-	-	-	-	
Existing Exempt Debt - School and Public Safety Center		4,828,400	4,125,342	3,981,010	3,859,110	3,601,449	3,068,924	2,740,313	Actual Debt
TOTAL		14,790,395	14,048,906	14,862,255	15,772,240	16,787,454	17,099,413	16,586,103	
Capital Projects Fund from taxation		3,440,000	3,678,875	3,265,077	4,120,109	3,934,316	3,669,433	3,455,598	FY19-FY23 CIP Actual Requests
Capital Projects Fund from taxation		3,440,000	3,678,875	3,265,077	4,120,109	3,934,316	3,669,433	3,455,598	
TOTAL		6,880,000	7,357,750	6,530,154	8,240,218	7,868,632	7,338,866	6,911,196	
OFFSET/AVAILABLE FUNDS EXPENDITURES									
Officer Local Revenues		2,070,000	2,148,530	1,962,000	1,962,000	1,962,000	1,962,000	1,962,000	
Other Available Funds- Budget		265,000	230,298	265,000	265,000	265,000	265,000	265,000	
TOTAL		2,335,000	2,378,828	2,227,000	2,227,000	2,227,000	2,227,000	2,227,000	Parking(\$210,000)/wetlands(\$25,000)/ATIS(\$30,000)
ARTICLES									
Bond Stabilization Fund - Free Cash		268,000	-	-	-	-	-	-	
Capital Projects Articles - Free Cash		3,525,000	575,000	4,200,000	-	-	-	-	
Operating Budget - FY17		-	1,250,000	-	-	-	-	-	
Articles from Water/Sewer reserves		1,163,000	300,000	445,000	893,000	895,000	330,000	500,000	Water DPW-12.5195K, DPW-17.5100K, Sewer DPW-24.550K, DPW-30.5100K
Parking Funds		-	123,000	75,000	75,000	75,000	75,000	75,000	
Debt Re-Purpose		-	1,025,000	-	-	-	-	-	
Articles from taxation		150,007	31,000	31,000	31,000	31,000	31,000	31,000	Townsp-S12/Keisic events-S55/fireworks-S14K
Other Available Funds		302,138	421,000	206,000	306,000	306,000	306,000	306,000	Cable Funds IT-3 Cemetery-S6K
TOTAL		5,408,145	3,725,000	4,957,000	1,305,000	1,307,000	742,000	912,000	
* TOTAL DEDUCTIONS *		64,157,663	65,311,140	69,409,517	70,821,350	74,453,175	77,221,562	80,147,776	
BAL. FOR TOWN & SCHOOL OPERATING BUDGE		114,536,592	118,969,274	123,232,645	124,816,794	127,677,282	130,580,593	134,010,265	
\$ INCREASE FOR TOWN & SCHOOL OPERATING B		3,914,700	4,433,682	4,263,371	1,584,150	2,860,487	2,903,311	3,429,672	
% INCREASE OVER PRIOR YEAR		3.54%	3.87%	3.58%	1.29%	2.29%	2.27%	2.63%	
TOTAL		178,694,255	184,380,414	192,642,162	195,638,144	202,130,457	207,802,155	214,158,041	

**DETAIL DEBT SCHEDULE BY FISCAL YEAR
AS OF JULY 1, 2017
PRINCIPAL AND INTEREST**

ISSUE	ARTICLE	2018	2019	2020	2021	2022	2023	TOTAL ALL YEARS
EXEMPT DEBT								
SCHOOL								
SCHOOL BONDS EXEMPT REFI	ART 19, 1999	133,300.00	123,625.00	117,875.00	-	-	-	374,800.00
SCHOOL BONDS -Sewer REFI	ART 9, 2000	166,775.00	156,100.00	149,100.00	142,800.00	-	-	614,775.00
SCHOOL BONDS EXEMPT REFI	ART 9, 2000	393,012.50	381,287.50	362,987.50	348,137.50	333,487.50	318,543.75	2,137,456.25
BANCROFT FEASIBILITY	ART 9, 2009	13,162.50	12,812.50	12,412.50	12,112.50	11,812.50	11,500.00	129,950.05
MIDDLE/EL SCHOOL Refi NC	ART 9, 2000	215,100.00	208,500.00	197,000.00	175,900.00	165,200.00	159,600.00	1,566,500.00
BANCROFT SCHOOL	ART 03, 2012	1,071,000.00	1,043,000.00	1,034,250.00	1,013,250.00	985,250.00	957,250.00	14,256,375.00
BANCROFT SCHOOL	ART 03, 2012	1,112,812.50	1,080,062.50	1,047,312.50	1,014,562.50	981,812.50	949,062.50	14,867,375.00
BANCROFT SCHOOL	ART 1, 2013	210,150.00	203,900.00	197,650.00	191,400.00	180,150.00	174,150.00	2,738,200.00
BANCROFT SCHOOL	ART 3, 2010	8,162.50	7,962.50	7,762.50	7,562.50	7,362.50	7,162.50	118,450.00
BANCROFT SCHOOL	ART 1, 2013	64,487.50	62,887.50	61,287.50	59,687.50	58,087.50	56,487.50	909,600.00
BANCROFT SCHOOL	ART 3, 2010	89,387.50	79,860.00	78,360.00	76,860.00	72,405.00	73,950.00	1,298,397.50
TOTAL SCHOOL	017112-5741	3,477,350.00	3,359,997.50	3,265,997.50	3,042,272.50	2,795,567.50	2,707,706.25	39,031,878.80
PUBLIC SAFETY								
PUBLIC SAFETY CENTER REFI	ART 16, 1999	316,725.00	300,850.00	287,350.00	270,300.00	-	-	1,175,225.00
PUBLIC SAFETY CENTER REFI	ART 40, 2001	11,950.00	11,550.00	11,050.00	10,600.00	10,200.00	-	55,350.00
PUBLIC SAFETY CENTER REFI	ART 16, 1999	280,225.00	270,825.00	259,075.00	243,600.00	229,500.00	-	1,283,225.00
PUBLIC SAFETY CENTER	ART 10-1, 2002	6,281.26	6,081.26	5,887.51	5,696.88	5,500.00	5,300.00	39,846.91
PUBLIC SAFETY CENTER	ART 10-1, 2002	32,810.00	31,705.00	29,750.00	28,979.68	28,156.26	27,306.26	314,972.82
TOTAL PUBLIC SAFETY CENTER	017112-5746	647,991.26	621,011.26	593,112.51	559,176.56	273,356.26	32,606.26	2,868,619.73
TOTAL EXEMPT		4,125,341.26	3,981,008.76	3,859,110.01	3,601,449.06	3,068,923.76	2,740,312.51	41,900,498.53
PUBLIC SERVICE ENTERPRISES								
WATER DEBT								
WATER TREATMENT PLANT	ART 42, 2002	59,230.00	57,480.00	50,580.00	49,230.00	47,880.00	46,473.75	354,357.50
WATER SYSTEM	ART 20, 2003	119,507.50	116,007.50	112,007.50	109,007.50	101,107.50	98,138.75	748,811.25
WATER MAINS REFINANCED	ART 43, 2002	31,876.00	30,876.00	29,876.00	28,876.00	27,876.00	21,976.00	212,320.00
WATER SYSTEM	ART 20, 2008	68,412.50	66,575.00	64,712.50	62,825.00	60,912.50	58,975.00	598,412.50
WATER PLANT (WPAT)	ART 34, 2005	283,576.00	283,576.30	283,575.89	283,575.84	283,576.17	283,575.87	2,835,760.22
WATER PLANT (WPAT)	ART 34, 2005	38,370.56	38,370.64	38,370.28	38,370.23	38,370.23	38,371.01	460,446.20
WATER SYSTEM	ART 20, 2003	105,281.26	102,281.26	99,375.01	96,515.63	93,562.50	85,662.50	968,596.91
WATER SYSTEM	ART 34, 2005	71,000.00	69,000.00	67,062.50	65,156.25	63,187.50	61,187.50	672,250.00
WATER SYSTEM	ART 41, 2005	5,100.00	-	-	-	-	-	5,100.00
WATER SYSTEM	ART 34, 2005	21,000.00	-	-	-	-	-	21,000.00
WATER TREATMENT PLANT	ART 34, 2010	20,100.00	19,575.00	18,975.00	18,525.00	18,075.00	12,662.50	210,075.00
WTP GRANULAR CARBON	ART 33, 2010	46,200.00	44,800.00	43,200.00	42,000.00	40,800.00	-	217,000.00
WATER TREATMENT PLANT	ART 33, 2010	34,800.00	33,600.00	32,400.00	31,200.00	-	-	132,000.00
WATER MAINS	ART 31, 2010	38,250.00	37,250.00	36,937.50	36,187.50	35,187.50	34,187.50	509,156.26
WATER TREATMENT PLANT PUMP	ART 44, 2011	11,625.00	11,225.00	11,100.00	10,800.00	10,400.00	-	55,150.00
WATER MAIN CONSTRUCTION	ART 42, 2011	42,531.26	41,281.26	40,031.26	38,781.26	37,531.26	36,281.26	569,937.62
WATER MAIN REPLACEMENT	ART 35, 2012	125,087.50	121,337.50	117,587.50	113,837.50	105,087.50	101,587.50	1,618,325.00
HYDRANT REPLACEMENT	ART 46, 2013	67,500.00	65,000.00	62,500.00	60,000.00	57,500.00	55,000.00	420,000.00
WATER MAIN REPLACEMENT	ART 41, 2013	85,062.50	82,562.50	80,062.50	77,562.50	75,062.50	72,562.50	1,139,875.00
GAC REPLACEMENT	ART 33, 2010	13,500.00	13,000.00	12,500.00	12,000.00	11,500.00	11,000.00	84,000.00
WATER DISTRIBUTION MAINTENANCE	ART 43, 2012	66,000.00	64,000.00	62,000.00	60,000.00	58,000.00	56,000.00	472,000.00
WATER DISTRIBUTION MAINT PROGRAM	ART 42, 2013	66,000.00	64,000.00	62,000.00	60,000.00	58,000.00	56,000.00	472,000.00
FIRE HYDRANT INFRAST MAINT 1	ART 46, 2016	66,000.00	64,000.00	62,000.00	60,000.00	58,000.00	56,000.00	472,000.00
FIRE HYDRANT INFRAST MAINT 2	ART 22, 2014	66,000.00	64,000.00	62,000.00	60,000.00	58,000.00	56,000.00	472,000.00
WATER TREATMENT PLANT EQUIPMENT	ART 44, 2011	45,800.00	44,400.00	43,000.00	41,600.00	40,200.00	38,800.00	317,400.00
WATER STORAGE TANKS REHAB	ART 44, 2016	194,505.00	178,984.00	174,784.00	170,584.00	166,187.00	162,190.00	1,625,199.00
TOTAL WATER	017102-5742	1,792,315.08	1,713,181.96	1,666,637.44	1,626,634.21	1,546,003.16	1,442,631.64	15,663,172.46

DETAIL DEBT SCHEDULE BY FISCAL YEAR
AS OF JULY 1, 2017
PRINCIPAL AND INTEREST

ISSUE	ARTICLE	2018	2019	2020	2021	2022	2023	TOTAL ALL YEARS
SEWER DEBT								
SEWER SO MAIN ST (Betterment) REFI	ART 41, 1999	292,375.00	282,575.00	270,325.00	254,400.00	244,800.00	-	1,344,475.00
SEWER FOREST HILLS (Betterment) REFI	ART 13, 2000	196,975.00	190,375.00	182,125.00	174,700.00	163,200.00	-	907,375.00
SEWER SO MAIN ST (Betterment)	ART 41, 1999	228,575.00	221,750.00	209,050.00	203,350.00	192,750.00	182,025.00	1,237,500.00
SEWER ROGERS BROOK (Betterment)	ART 42, 1999	58,462.50	56,712.50	54,712.50	48,262.50	46,912.50	45,506.25	310,568.75
SEWER SO MAIN ST (Betterment)	ART 41, 1999	179,362.50	174,112.50	168,112.50	158,662.50	154,312.50	149,781.25	1,125,918.75
SEWER ROGERS BROOK (Betterment)	ART 42, 1999	192,600.00	187,175.00	229,975.00	223,825.00	212,775.00	201,581.25	1,445,125.00
SEWER SO MAIN ST (Betterment)	ART 41, 1999	122,914.00	119,114.00	115,314.00	111,514.00	107,714.00	103,914.00	862,755.00
SEWER SO MAIN ST (Betterment)	ART 2A, 2004	68,412.50	66,575.00	64,712.50	62,825.00	60,912.50	58,975.00	598,412.50
SEWER SO MAIN ST (Betterment)	ART 41, 1999	268,558.75	266,300.00	258,850.00	251,300.00	243,650.00	235,900.00	2,388,558.75
SEWER SO MAIN ST (Betterment)	ART 35, 2004	85,200.00	82,800.00	80,475.00	78,187.50	75,825.00	73,425.00	806,700.00
SEWER SO MAIN ST (Betterment)	ART 41, 1999	307,056.20	308,256.20	299,537.45	290,950.34	282,099.98	258,399.98	2,940,165.32
SEWER SO MAIN ST (Betterment)	ART 2A, 2004	35,500.00	34,500.00	33,531.25	32,578.13	31,593.76	30,593.76	336,125.06
SEWER	Art 33, 2006	28,262.50	27,262.50	21,262.50	20,718.76	20,137.50	19,537.50	240,943.80
SEWER SHAW/SHEEN OUTFALL	Art 33, 2007	113,812.50	110,062.50	106,312.50	103,593.76	100,687.50	97,687.50	1,150,968.80
SEWER - DASCOMB ROAD (Betterment)	Art 36, 2007	15,175.00	14,675.00	14,175.00	13,812.50	13,425.00	13,025.00	133,462.50
SEWER KIRKLAND ROAD (Betterment)	Art 41, 2007	20,675.00	19,925.00	14,175.00	13,812.50	13,425.00	13,025.00	164,212.50
SEWER SAW/SHEEN PUMP STATION	Art 64, 2007	15,175.00	14,675.00	14,175.00	13,812.50	13,425.00	13,025.00	153,462.50
SEWER SHAW/SHEEN OUTFALL	Art 33, 2008	23,531.26	22,931.26	22,331.26	21,731.26	21,131.26	20,531.26	274,743.88
SEWER	ART 46, 2010	14,325.00	13,975.00	13,575.00	13,275.00	12,975.00	12,662.50	182,950.00
SEWER MAINS	Art 51, 2001	15,687.50	15,287.50	14,887.50	14,487.50	14,087.50	13,687.50	183,162.50
SHAW/SHEEN PUMPING STATION	ART 64, 2007	15,300.00	14,900.00	14,775.00	14,475.00	14,075.00	13,675.00	203,662.50
REPAIR SANITARY SEWER	ART 33, 2006	13,662.50	13,262.50	13,137.50	12,837.50	12,437.50	12,037.50	135,606.26
SEWER MAIN CONSTRUCTION	ART 51, 2008	22,950.00	22,350.00	22,162.50	21,712.50	21,112.50	20,512.50	305,493.76
SEWER MAIN CONSTRUCTION	ART 32, 2010	38,250.00	37,250.00	36,937.50	36,187.50	35,187.50	34,187.50	509,136.26
SEWER INFRASTRUCTURE VEHICLE	ART 37, 2012	33,675.00	32,475.00	32,100.00	31,200.00	-	-	129,450.00
TOTAL SEWER		2,406,472.71	2,349,276.46	2,306,726.46	2,222,220.25	2,108,651.50	1,623,695.25	18,090,954.39
TOTAL ENTERPRISE	017102-5743	4,198,787.79	4,062,458.42	3,973,363.90	3,848,854.46	3,654,654.66	3,066,326.89	33,754,126.85

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ISSUE	ARTICLE	2018	2019	2020	2021	2022	2023	TOTAL ALL YEARS
GENERAL FUND NON-EXEMPT								
SCHOOL DEBT								
SCHOOL BUILDINGS	ART 28-2, 2002	63,300.00	61,200.00	-	-	-	-	124,500.00
WEST EL - ASBESTOS	ART 12, 2002	102,215.00	95,880.00	-	-	-	-	198,095.00
COLLINS CTR HVAC	ART 29, 2004	37,800.00	36,400.00	17,850.00	-	-	-	92,050.00
SCHOOL RENOVATIONS	ART 11, 2005	66,200.00	64,200.00	62,200.00	60,200.00	58,200.00	51,300.00	505,400.00
WEST EL - ASBESTOS	ART 12, 2002	13,282.50	12,915.00	12,542.50	12,165.00	11,782.50	11,395.00	105,882.50
SCHOOL HVAC	ART 46, 2006	16,007.50	16,467.50	15,925.00	15,391.25	14,840.00	14,280.00	92,911.25
WEST EL - ASBESTOS	ART 12, 2002	6,081.26	5,881.26	5,687.51	5,496.88	5,300.00	5,100.00	33,546.91
SCHOOL RENOVATIONS	ART 17, 2006	18,243.76	17,643.76	17,062.51	16,490.63	15,900.00	15,300.00	100,640.66
SCHOOL RENOVATIONS	ART 11, 2005	41,587.50	35,287.50	34,125.00	32,981.25	31,800.00	30,600.00	206,381.25
SCHOOL RENOVATIONS	ART 17, 2006	67,418.76	65,118.76	61,818.76	60,187.50	58,443.76	56,643.76	624,106.32
SCHOOL ROOF	ART 17, 2007	114,825.00	110,925.00	109,025.00	106,125.00	103,025.00	99,825.00	1,071,775.00
SCHOOL RENOVATIONS	ART 28, 2007	36,406.26	35,156.26	33,906.26	33,000.00	32,031.26	31,031.26	330,937.56
LOVELY FIELD RENOVATIONS	ART 29, 2008	22,000.00	21,000.00	-	-	-	-	43,000.00
SCHOOL ROOF	ART 15, 2007	117,200.00	114,000.00	110,000.00	106,400.00	103,200.00	100,000.00	1,165,200.00
SCHOOL REMODELING	ART 28, 2007	22,125.00	21,525.00	20,775.00	20,100.00	19,500.00	18,900.00	223,725.00
SCHOOL REPAIRS	ART 27, 2008	79,325.00	77,125.00	74,375.00	71,000.00	68,000.00	65,000.00	761,825.00
SCHOOL REMODELING	ART 28, 2007	22,875.00	22,275.00	21,675.00	21,075.00	20,475.00	19,875.00	250,556.26
SCHOOL REPAIRS	ART 27, 2008	66,800.00	65,000.00	63,200.00	61,400.00	59,600.00	57,800.00	690,150.00
SCHOOL REPAIRS	ART 56, 2009	68,406.26	66,606.26	64,806.26	63,006.26	61,206.26	59,406.26	743,825.12
SCHOOL RENOVATIONS	ART 41, 2010	156,875.00	152,875.00	148,875.00	144,875.00	140,875.00	136,875.00	1,831,625.00
SCHOOL REMODELING	ART 16, 2011	64,462.50	62,887.50	61,087.50	59,737.50	58,387.50	56,981.25	823,275.05
WEST MIDDLE SCHOOL	ART 17, 2011	48,862.50	47,637.50	46,237.50	45,187.50	44,137.50	43,043.75	581,593.75
SCHOOL ROOF REPAIRS	ART 41, 2010	35,812.50	34,937.50	33,937.50	33,187.50	32,437.50	31,656.25	457,375.05
VETERANS WAR MEMORIAL AUDITORIUM	ART 58, 2009	52,862.50	51,462.50	50,062.50	48,662.50	47,262.50	45,862.50	571,487.50
SCHOOL BUILDING RENOVATIONS	ART 25, 2012	95,712.50	87,912.50	87,100.00	85,150.00	82,550.00	79,950.00	879,125.00
WEST MIDDLE SCHOOL REPAIRS	ART 38, 2012	43,512.50	42,312.50	36,937.50	36,187.50	35,187.50	34,187.50	519,481.26
BANCROFT SCHOOL	ART 1, 2013	82,056.26	79,556.26	72,056.26	69,806.26	67,556.26	65,306.26	1,036,637.62
SCHOOL REPAIRS	ART 36, 2013	76,556.26	74,306.26	72,056.26	69,806.26	67,556.26	65,306.26	1,025,887.62
SCHOOL SITE IMP (DOHERTY)	ART 18, 2013	204,150.00	198,150.00	192,150.00	186,150.00	180,150.00	174,150.00	2,735,700.00
WEST MIDDLE HVAC	ART 38, 2013	128,450.00	124,200.00	119,950.00	115,700.00	111,450.00	107,200.00	1,248,000.00
SCHOOL BLDG MAINT & RENOVATION	ART 52, 2014	147,000.00	143,000.00	139,000.00	135,000.00	131,000.00	127,000.00	1,609,000.00
BANCROFT SCHOOL	ART 1, 2013	24,000.00	23,400.00	22,800.00	22,200.00	21,600.00	21,000.00	332,062.50
SCHOOL BLDG MAINT & RENOVATION	ART 39, 2015	62,012.50	57,125.00	55,775.00	54,425.00	53,075.00	51,725.00	508,962.50
LOVELY FIELD TURF REPLACEMENT	ART 30, 2016	68,750.00	63,350.00	61,850.00	60,350.00	58,850.00	57,425.00	559,750.00
SCHOOL BLDG MAINT & RENOVATION	ART 34, 2016	68,750.00	63,350.00	61,850.00	60,350.00	58,850.00	57,425.00	559,750.00
TOTAL SCHOOL	017102-5741	2,341,923.82	2,251,068.82	1,986,698.82	1,907,793.79	1,841,228.80	1,769,950.05	22,644,220.68

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ISSUE	ARTICLE	2018	2019	2020	2021	2022	2023	TOTAL ALL YEARS
STREET								
BRIDGE CONSTRUCTION	ART 54, 2005	13,282.50	12,915.00	12,542.50	12,165.00	11,782.50	11,395.00	105,882.50
STORM DRAINS	ART 50, 2008	7,587.50	7,337.50	7,087.50	6,906.26	6,712.50	6,512.50	76,731.30
MAIN ST DEVELOPMENT	ART 48, 2002	31,700.00	25,625.00	-	-	-	-	57,325.00
BRIDGE CONSTRUCTION	ART 52, 2007	7,625.00	7,425.00	7,225.00	7,025.00	6,825.00	6,625.00	83,518.76
BRIDGE CONSTRUCTION	ART 32, 2008	30,718.76	29,918.76	29,118.76	28,318.76	27,518.76	26,718.76	342,137.64
BRIDGE REPAIR	ART 24, 2011	7,162.50	6,987.50	6,787.50	6,637.50	6,487.50	6,331.25	91,475.05
PARKING LOT	ART 25, 2011	6,393.76	6,218.76	6,018.76	5,868.76	5,718.76	5,562.51	56,834.46
DRAINAGE	ART 33, 2011	14,325.00	13,975.00	13,575.00	13,275.00	12,975.00	12,662.50	182,950.00
SURFACE DRAIN CONSTRUCTION	ART 50, 2008	22,687.50	22,087.50	21,487.50	20,887.50	20,287.50	19,687.50	244,162.50
BRIDGE REPAIR	ART 32, 2008	15,300.00	14,900.00	14,775.00	14,475.00	14,075.00	13,675.00	203,662.50
STORM DRAINAGE	ART 33, 2011	7,650.00	7,450.00	7,387.50	7,237.50	7,037.50	6,837.50	101,831.26
HIGH PLAIN/FISHBROOK	ART 42, 2012	98,362.50	95,562.50	94,687.50	92,587.50	89,787.50	86,987.50	1,013,731.26
SIDEWALK CONSTRUCTION	ART 20, 2014	28,000.00	27,000.00	26,000.00	-	-	-	81,000.00
MINOR STORM DRAIN REPAIRS	ART 44, 2015	41,201.25	37,971.00	37,071.00	36,171.00	34,778.50	34,386.00	335,154.75
SIDEWALK CONSTRUCTION - RIVER ST	ART 62, 2015	46,791.25	44,113.00	42,913.00	41,713.00	37,656.50	-	213,186.75
TOTAL STREET	017102-5744	378,787.52	359,486.52	326,676.52	293,267.78	281,642.52	237,381.02	3,189,583.73
MUNICIPAL FACILITIES								
TOWN BUILDINGS	ART 28-1, 2002	8,440.00	8,160.00	-	-	-	-	16,600.00
BRIDGES/BUILDINGS	ART 32, 2001	78,845.00	69,360.00	-	-	-	-	148,205.00
TOWN HVAC	ART 46, 2006	18,820.00	18,820.00	18,200.00	17,590.00	16,960.00	16,320.00	108,370.00
TOWN BUILDING RENOVATION	ART 27, 2007	20,812.50	20,062.50	19,312.50	18,768.76	18,187.50	12,587.50	166,281.26
TOWN BUILDING RENOVATION	ART 28, 2007	22,325.00	21,575.00	20,825.00	20,281.26	19,700.00	19,100.00	215,162.54
PUBLIC SAFETY (NON EXEMPT PORTION)	ART 10, 2002	5,790.00	5,595.00	5,250.00	5,114.06	4,968.76	4,818.76	55,583.44
TOWN BUILDINGS	ART 27, 2007	29,500.00	28,700.00	27,700.00	26,800.00	26,000.00	25,200.00	298,300.00
TOWN BUILDING REMODELING	ART 55, 2009	52,750.00	51,350.00	49,950.00	48,550.00	47,150.00	45,750.00	562,112.50
TOWN BUILDING REPAIRS	ART 42, 2010	13,162.50	12,812.50	12,412.50	12,112.50	11,812.50	11,500.00	129,950.05
TOWN BUILDING REPAIRS	ART 34, 2011	35,812.50	34,937.50	33,937.50	33,187.50	32,437.50	31,656.25	457,375.05
TOWN BUILDING REPAIRS	ART 27, 2007	7,162.50	6,987.50	6,787.50	6,637.50	6,487.50	6,331.25	91,475.05
BLANCHARD BALLFIELDS	ART 57, 2009	25,575.00	24,875.00	24,075.00	23,475.00	22,875.00	22,250.00	227,337.50
BLANCHARD ST BALLFIELDS	ART 57, 2009	6,600.00	6,400.00	6,200.00	6,000.00	5,800.00	5,600.00	47,200.00
TOWN BUILDING RENOVATIONS	ART 23, 2007	19,957.50	19,337.50	19,150.00	18,700.00	18,100.00	17,500.00	168,225.00
PLAYGROUND REPLACEMENTS	ART 23, 2012	20,037.50	19,437.50	19,250.00	18,800.00	18,200.00	17,600.00	167,925.00
TOWN BUILDING REMODELING	ART 24, 2012	40,012.50	33,812.50	33,500.00	32,750.00	31,750.00	30,750.00	341,325.00
BALMORAL FENCE/MASONRY	ART 28, 2012	12,975.00	12,575.00	12,450.00	12,150.00	11,750.00	11,350.00	101,000.00
FIRE COMMUNICATIONS	ART 31, 2012	23,250.00	22,450.00	22,200.00	21,600.00	20,800.00	-	110,300.00
TECHNOLOGY HARDWARE	ART 22, 2012	208,637.50	196,437.50	194,250.00	189,000.00	182,000.00	-	970,325.00
YOUTH CENTER	ART 3, 2011 STM	170,125.00	165,125.00	160,125.00	155,125.00	150,125.00	145,125.00	2,279,750.00
TOWN BUILDING RENOVATIONS	ART 28, 2013	30,425.00	29,425.00	28,425.00	27,425.00	26,425.00	25,425.00	301,500.00
TECHNOLOGY INFRASTRUCTURE	ART 22, 2012	44,800.00	43,200.00	41,600.00	-	-	-	129,600.00
TOWN & SCHOOL ENERGY INITIATIVES	ART 39, 2014	32,400.00	31,400.00	30,400.00	29,400.00	28,400.00	22,400.00	216,800.00
TOWN BLDG & FACILITY MAINTENANCE	ART 43, 2014	64,600.00	57,600.00	55,800.00	54,000.00	52,200.00	50,400.00	430,000.00
DPW VEHICLES	ART 45, 2014	56,000.00	54,000.00	52,000.00	-	-	-	162,000.00
PLAYGROUND REPLC & HANDICAP ACCESS	ART 41, 2014	19,800.00	19,200.00	18,600.00	18,000.00	17,400.00	16,800.00	141,600.00
SAFETY & SECURITY UPGRADES	ART 38, 2015	55,280.00	50,904.00	49,704.00	48,504.00	47,304.00	46,104.00	456,464.00
TOWN BUILDING REMODELING	ART 46, 2015	125,802.50	114,002.00	111,602.00	109,202.00	105,226.00	104,450.00	1,448,034.50
PUBLIC WORKS VEHICLES	ART 26, 2016	81,820.00	77,146.00	75,046.00	72,946.00	64,148.00	-	371,106.00
TOWN BLDG & FACILITY MAINTENANCE	ART 28, 2016	48,062.50	44,295.00	43,245.00	42,195.00	41,145.00	40,095.00	391,282.50
TOTAL MUNICIPAL FACILITIES	017102-5745	1,381,220.00	1,299,982.00	1,191,997.00	1,068,313.58	1,027,351.76	729,112.76	10,711,189.39

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ISSUE	ARTICLE	2018	2019	2020	2021	2022	2023	TOTAL ALL YEARS
PUBLIC SAFETY								
FIRE TRUCK REFINANCED	ART 31, 2004	43,700.00	42,100.00	33,150.00	-	-	-	118,950.00
FIRE TRUCK	ART 37, 2006	35,287.50	34,087.50	32,925.00	31,781.25	30,600.00	-	164,681.25
TOTAL PUBLIC SAFETY	017102-5746	78,987.50	76,187.50	66,075.00	31,781.25	30,600.00	-	283,631.25
LAND ACQUISITION								
LAND ACQUISITION REFINANCE	ART 23, 2002	63,740.00	61,740.00	54,840.00	53,040.00	51,240.00	49,440.00	426,050.00
LAND ACQUISITION REFINANCE	ART 32, 2000	88,870.00	86,070.00	83,270.00	80,470.00	77,670.00	74,870.00	580,375.00
LAND ACQUISITION	ART 12, 2001	78,145.00	71,032.50	68,983.75	66,907.50	64,803.75	62,672.50	587,445.00
16 PEARSON ST	ART 3A, 2007	33,656.26	32,656.26	31,687.51	30,734.38	29,750.00	28,750.00	273,784.41
18 PEARSON ST	ART 4A, 2007	27,575.00	26,775.00	26,000.00	25,237.50	24,450.00	23,650.00	240,237.50
37 PEARSON ST	ART 5A, 2007	34,468.76	33,468.76	32,500.01	31,546.88	30,562.50	29,562.50	300,296.92
15 BLANCHARD ST	ART 51, 2007	149,100.00	144,900.00	140,831.25	136,828.13	132,693.76	128,493.76	1,411,725.06
LAND ACQUISITION	ART 12, 2001	7,625.00	7,425.00	7,225.00	7,025.00	6,825.00	6,625.00	83,518.76
LAND ACQUISITION FOSTERS POND	ART 55, 2010	15,687.50	15,287.50	14,887.50	14,487.50	14,087.50	13,687.50	183,162.50
LAND ACQUISITION BLANCHARD ST	ART B1, 2011	23,093.76	22,493.76	21,893.76	21,293.76	20,693.76	20,093.76	258,837.62
LAND ACQUISITION CHANDLER RD	ART 33, 2013	67,150.00	65,150.00	63,150.00	61,150.00	59,150.00	57,150.00	873,287.50
TOTAL LAND ACQUISITION	017102-5747	589,111.28	566,998.78	545,268.78	528,720.65	511,926.27	494,995.02	5,218,720.27
LANDFILL CLOSURE	ART 44, 1999	33,206.25	32,287.50	31,356.25	30,412.50	29,456.25	28,487.50	264,706.25
LANDFILL	ART 44, 1999	21,487.50	20,962.50	20,362.50	19,912.50	19,462.50	18,993.75	274,425.05
LANDFILL	ART 44, 1999	21,487.50	20,962.50	20,362.50	19,912.50	19,462.50	18,993.75	274,425.05
LANDFILL	ART 44, 1999	7,162.50	6,987.50	6,787.50	6,637.50	6,487.50	6,331.25	91,475.05
LANDFILL	ART 44, 1999	7,162.50	6,987.50	6,787.50	6,637.50	6,487.50	6,331.25	91,475.05
LANDFILL	ART 44, 1999	17,012.50	16,512.50	16,012.50	15,512.50	15,012.50	14,512.50	227,975.00
DEPARTMENTAL EQUIPMENT	ART 02, 2008	121,800.00	-	-	-	-	-	121,800.00
REC PARK LIGHTING	ART 48, 2008	10,650.00	10,250.00	-	-	-	-	20,900.00
CLOSING LANDFILL	ART 44, 1999	57,137.50	55,737.50	54,337.50	52,937.50	51,537.50	50,137.50	829,150.00
LANDFILL (MCWT)	ART 31, 2008	40,851.92	40,899.96	40,949.88	41,000.40	41,051.26	41,104.20	785,567.66
TOTAL GENERAL FUND NON-EXEMPT	017102-5749	337,958.17	211,587.46	196,956.13	192,962.90	188,957.51	184,891.70	2,981,899.11
GRAND TOTAL		13,432,117.34	12,808,778.26	12,146,146.16	11,473,143.47	10,605,285.28	9,222,969.95	120,683,869.81